THE BEAUTIFUL IN STRANGENESS: THE EXTENDED VOCAL TECHNIQUES OF JOAN LA BARBARA

By

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by

Linda Ann Brown

. . . there is no excellent beauty that hath not some strangeness in the proportion.

- Lord Bacon

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TABLE OF CONTENTS

page

ACKNOWLEDGEMENTS iv

ABSTRACT vi

CHAPTER

1 INTRODUCTION 1

2 REVIEW OF LITERATURE 10

3 THE EARLY CAREER OF JOAN LA BARBARA: HER EXTENDED TECHNIQUES DEFINED 22

4 THE MATURE COMPOSITIONAL STYLE OF JOAN LA BARBARA 51

5 SOCIAL, POLITICAL, AND CULTURAL CHANGES THAT INFLUENCED JOAN LA BARBARA'S WORK AS A FEMALE COMPOSER AND PERFORMER 77

6 CONCLUSION AND APPLICATIONS FOR TEACHING MUSIC 88

APPENDIX

A COMPOSITIONS BY JOAN LA BARBARA: 1974-1997 95

B DISCOGRAPHY OF WORKS BY JOAN LA BARBARA 104

REFERENCES 106

BIOGRAPHICAL SKETCH 111

Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

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Joan La Barbara has dedicated her career to the exploration of the human voice as a multi-faceted instrument. As a pioneer in the field of contemporary art music, La Barbara has developed a unique vocabulary of vocal techniques that extend the human voice far beyond the boundaries of traditional western operatic and art music styles. She has worked to perfect many of these techniques including multiphonics, overtone focusing, resonance focusing, harmonic isolation, circular singing, rhythmic breathing, ululations, vocal fry, glottal clicks, and pure tone singing. Her work in this field has influenced the writing styles of composers such as Philip Glass, Morton Subotnick, and John Cage. Despite her contribution to the area of extended vocal techniques, Joan La Barbara is not widely recognized among music historians.

During the 1970s, La Barbara experimented with vocal timbres and began perfecting extended techniques she could consistently produce. She wrote etudes and other compositions based on these techniques. During this time her work began to influence the writing style of other composers.

The early 1980s marked the beginning of La Barbara's mature compositional period. She has written more than forty compositions since this time, and her pieces reflect her continuous desire to incorporate extended vocal techniques into the traditional western classical style. Three of her purely vocal compositions, "Erin," "Time(d) Trials and Unscheduled Events," and "to hear the wind roar," are examined to determine if La Barbara's mature compositional style bears an overall compositional design. It was determined that all three works were composed using a layering technique, but each differed from the others in the presentation of the layers.

La Barbara's work in the area of extended vocal techniques is important to all areas of music education. Historians, composers, theorists, and performers should all be made aware of her contributions to western art music. She has broadened the sonic pallet and worked collaboratively with others to expand previously-set musical boundaries. Joan La Barbara has carved a permanent place for herself in music history.

CHAPTER 1
INTRODUCTION

Joan La Barbara has dedicated her career as a composer and performer to the exploration of the human voice as a multi-faceted instrument. As a pioneer in the field of contemporary classical music, La Barbara has developed a unique vocabulary of vocal techniques that extend the human voice far beyond the boundaries of traditional operatic and art music styles. La Barbara has spent a lifetime perfecting many of these extended vocal techniques and some of these techniques have become her "signature" sounds.

"Extended vocal techniques" is a term that first appeared in the twentieth century to describe any technique utilized by a singer which is not part of the standard procedure for performance of American and European classical vocal works. Although the term is usually associated only with techniques that have evolved from twentieth-century practices, it may be applied to vocal music from earlier historical periods. Throughout history, singers have experimented with vocal styles that differed from practices current at the time. These experimenters sought to reach beyond current vocal practices by employing new techniques that would further enhance texts and broaden the singer's ability to interpret the musical work.

An early form of extended vocal techniques can be traced back to the end of the sixteenth century with the introduction of monody. The Florentine Camerata of the Late Renaissance Period adopted a style of singing which differed greatly from current

sixteenth-century practices. While traditional singers from that time period sang in an often elaborate and highly melismatic fashion, the advocates for monody strove for a more declamatory style of singing--one in which the text could be clearly heard, accompaniments were simple, and vocal embellishments were no longer considered a part of the vocal fabric if they were employed merely as ornamentations of the melody. When embellishments were used in the monodic style of singing, their role was seen as functional to the expression of the text. This early vocal extended technique eventually became part of standard performance practices, but at its inception, the monodic style fell outside the realm of accepted performance practices of the sixteenth century. The new monodic style extended a singer's vocal vocabulary and potential for expression.

This concept of extending the singers' vocabulary continued to ebb and flow throughout the seventeenth, eighteenth, and nineteenth centuries. Composers periodically sought to stretch the limits of expression in vocal works. It was in the early part of the twentieth century, however, that composers of classical music began to utilize, on a large scale, the human voice in a manner that opposed traditional art song and operatic European singing styles altogether.

The use of the human voice to create a dramatic effect beyond traditional operatic European-style singing grew out of linguistic experiments adopted by European poets, artists, writers, and theatrical groups in the 1910s, 1920s, and 1930s. Deborah Kavasch, in her paper "Extended Vocal Techniques: Then and Now," gives a brief history of extended techniques. To summarize, she writes that some members of the Italian Futurist movement in the early part of the twentieth century encouraged vocalists to dehumanize the voice. Linguistic experimentation was done in the 1910s and 1920s by the cubo-futurist groups

of Russian poets. After 1918, speech-choirs were used in Germany in theatrical experiments and during the early 1920s the speech-choir movement spread to Austria, Hungary, Czechoslovakia, and Scotland. The Dada movement poets created "sound poems that combined vowels and consonants for their sonic qualities, or created repetitive poems in an abstract phonemic language."[1]

While poets, writers, and artists were experimenting with unique vocal sounds, composers, too, began to experiment with extended vocal techniques. One of the earliest extended vocal techniques to occur in the twentieth century was "sprechstimme," a declamatory-based style of vocalization first used in 1912 by Arnold Schoenberg (1874-1951) in his work *Pierrot lunaire*. "Sprechstimme" is a technique that requires the singer to speak on specific pitches. Schoenberg also introduced the concept of "klangfarbenmelodie," or "tone-color melody." This term was used by Schoenberg to describe his search for new timbres within the vocal and instrumental vocabulary. His experimentation in this area of music was continued by his student Anton Webern (1883-1945), though Webern's work more closely associates "klangfarbenmelodie" with instrumental music than vocal music. Although Schoenberg and other expressionistic composers, such as Alban Berg (1885-1935), experimented with extending vocalized sound beyond traditional European performance practices of the early part of the twentieth century, as a whole, composers of the early twentieth century continued to write for the voice using common-practice techniques. The Expressionists' intentional search

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[1]Deborah Kavasch, "Extended Vocal Techniques: Then and Now," Fourth International Symposium and Festival *Donne in Music gli Incontri al Borgo* (Fondazione Adkins Chiti: Donne in Music, Fiuggi Citta, Italy, September 6-12, 1999), page 2.

for new timbres in the first part of the twentieth century would evolve into the search for new sounds around the middle of the century.

During the first third of the twentieth century, blues and jazz styles of music were first introduced in America. Because of their influence on Joan La Barbara's style, it is here that an exception to classical vocal composition must be mentioned. The singing styles that grew out of these newly-created art forms emphasized improvisation and used techniques not traditionally used by singers such as scoops, slides, and bent notes (notes that are slightly flatted.) Also introduced at this time was the scat style of singing--a style in which a vocalist sings nonsense syllables and in which the emphasis is placed on the final vowel sound of each syllable. By changing the shape of the mouth and focusing the sound in different parts of the oral cavity, the singer of scat experiments with changing timbres. As will be shown, this experimentation with changing resonance cavities is a characteristic of La Barbara's work and grew out of her work in the area of jazz and improvisational singing.

The composer John Cage (1912-1992) would have a tremendous influence on the search for new sounds. His philosophy that any sound can be incorporated into a composition, even silence, opened the minds of those who recognized his genius to the possibility of sound expansion. His inclusion of manipulated sound in his own compositions, both through electronic means and by acoustic manipulation, laid the groundwork for other composers who took up this search for new timbres. La Barbara considers Cage as her mentor, and he encouraged her in her exploration of extended vocal techniques.

In the late 1940s and in the 1950s classical composers such as Luciano Berio (b. 1925) and Karlheinz Stockhausen (b. 1928) began to experiment with extended vocal techniques in their search for new vocal timbres, and other composers soon followed their lead. Berio's work *Visage* from 1961 utilizes the voice of Cathy Berberian, one of the first twentieth-century vocalists to add extended vocal techniques to her sonic vocabulary. *Visage* is one of the first works to include a wide variety of extended vocal techniques used as compositional tools. In this piece, Berberian uses articulated and inarticulated speech, laughter, crying, singing, patterns of inflections modeled upon specific languages, and aphasia. Berio's goal in this work was to create a work "based on the sound symbolism of vocal gestures and inflections with their accompanying 'shadow of meanings' and their associative tendencies." Berio continues, "*Visage* can be heard also as a metaphor of vocal behavior: it means discourse mainly at the onomatopoeic level. This *Visage* does not present meaningful speech but the semblance of it."[2] Berio moved vocal extensions beyond their use as tools for stretching the potential for artistic expression of text. He explored avenues of vocal expression that replace or move beyond words. Like the Austrians Schoenberg, Berg, and Webern before him, Berio sought to create new vocal timbres that could be incorporated into twentieth-century vocal music.

Since the early 1970s, with the onset of electroacoustic and computer music, many composers have turned toward creating new musical timbres. Composers of electroacoustic and computer music often look to the human voice as a source of inspiration and a model for inflection. Joel Chadabe, in his book *Electric Sound: The Past*

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[2]Luciano Berio, liner notes from "Visage" from *Electronic Music* (Library of Congress Card No. R66-2507.)

and Promise of Electronic Music, states, "We can also learn a lot from the human voice. With its expressivity and its complexity of sound modulation in changing from vowels to fricatives to sibilants, and in the immediacy of its translating human intentions into actual sound, the human voice has been viewed by many as the model for an ideal synthesizer." Chadabe names composers such as Xavier Rodet, Trevor Wishart, and Perry Cook as electronic music composers who "used the human voice tract as a model for electronically-produced sound."[3] The emphasis of vocal sound for these composers is not placed in the human throat's ability to create specific words, but rather on the human ability to create various sounds in an agile and seamless manner.

In their search for new tone colors composers have began to experiment with extended vocal techniques on a more widespread basis. Joan La Barbara began her sound explorations in the early 1970s as did a group of vocalists who came together in 1973 at the Center for Music Experiment at the University of California in San Diego under the title Extended Vocal Techniques Group. The group later changed its name to the Extended Vocal Techniques Ensemble and began the task of creating a lexicon of extended vocal techniques.

Two lexicons were developed by the Extended Vocal Techniques Ensemble. The first lexicon was created to categorize the extended techniques developed by members of the group. The nomenclature for the techniques was derived from the terminology compatible with linguistics. A second lexicon was created that "used a more subjective

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[3]Joel Chadabe, *Electric Sound: The Past and Promise of Electronic Music* (Upper Saddle River: Prentice Hall, 1997), p. 243.

terminology, which was less cumbersome and more indicative of the sounds."[4] It is the second lexicon and its companion cassette tape, entitled *Lexicon of Extended Vocal Techniques*, recorded in 1975 at the Center for Music Experiment at the University of California in San Diego, which remains intact and is available for examination through the private collection of Deborah Kavasch or Linda Ann Brown. The lexicon created and recorded by the Extended Vocal Techniques Ensemble is the only known dictionary of extended vocal techniques.

The *Lexicon* classifies seventy four different extended vocal techniques. The various techniques are subdivided into three main categories--monophonic extensions, multiphonic extensions, and miscellaneous extensions. Monophonic extensions are those which produce a single definitely-pitched sound when executed. Multiphonic extensions are those which produce two or more definitely-pitched sounds. Miscellaneous extensions produce sounds which are indefinitely-pitched. Within these three main categories are subgroups of extended techniques.

The subgroups are classified by production processes. The subgroups include non-nasalized and nasalized sounds, egressive (exhaled) and ingressive (inhaled) sounds, and voiced and unvoiced sounds. The subgroups are also classified by register within both the female and male vocal ranges and by physical manipulations including use of the tongue tip, tongue blade, uvula, lip, lip-tongue combination, hand-cheek combination, and lip-finger combination.

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[4]Deborah Kavasch, "Extended Vocal Techniques: Then and Now" Fourth International Symposium and Festival *Donne in Music gli Incontri al Borgo* (Fondazione Adkins Chiti: Donne in Music, Fiuggi Citta, Italy, September 6-12, 1999), p. 4.

The Extended Vocal Techniques Ensemble invited many vocalists who utilize extended techniques, including Joan La Barbara, to work with them in discovering and defining various techniques for inclusion in their *Lexicon*. As a result of this collaboration, many musicians, such as La Barbara, adopted much of the terminology newly created by the Extended Vocal Techniques Ensemble for the lexicon. Because it influences musicians and composers to utilize certain terminology that has become somewhat commonplace among extended techniques vocalists, the *Lexicon of Extended Vocal Techniques* serves as a main reference point for study of extended vocal techniques.

Other composers and performers have worked with extended vocal techniques on a large scale. Cathy Berberian, previously mentioned, worked extensively with Luciano Berio and his pieces that utilized extended vocal techniques. Jan De Gaetani performed works that included extended techniques, such as George Crumb's *Ancient Voices of Children*. Meredith Monk creates composite theatre works which incorporate extended techniques. Her work *Education of the Girlchild* (1973) includes animalistic sounds that are not based on any discernible text. In her vocal music, Monk explores the human voice as an instrument of sounds rather than words. David Moss makes the same kinds of sounds as Meredith Monk, but performs them differently in his exploration for more melodic possibilities. Edwin Harkin and Philip Larson helped organize the *Lexicon of Extended Vocal Techniques*, and both men performed many of the extended vocal techniques heard in the *Lexicon*. Yet, none of these composers or performers have explored extended vocal techniques in the same manner as Joan La Barbara. Berberian and De Gaetani wrote no music of their own which incorporated extended techniques. Monk performs only her own extended technique compositions, and does not, as a rule, perform

the works of other composers. Moss seeks to give meaning to the sound of the intonation of the speaking voice without actually articulating words. In his works he removes all semantic connotation and strives to free the listener to find meaning in the music.

Joan La Barbara's place among vocal extension artists is a significant one. The primary focus of her musical career since the early 1970s has been in the area of vocal extended techniques, and she is one of the few composers and performers to devote her musical life almost exclusively to works incorporating an extensive extended techniques vocabulary. She has created etudes for voice students to learn the art of vocal extension, compositions for vocal artists which incorporate extended vocal techniques, and she has worked with other musicians interested in utilizing extended vocal techniques to help them enhance their sonic vocabulary. Because of this willingness to work with other composers who are interested in incorporating extended vocal techniques into their music, La Barbara has placed extended techniques in the forefront of compositional tools available to contemporary composers, and she has virtually changed the course of many composers' writing styles. Her work has influenced the works of John Cage, Morton Subtonick (b. 1933), Morton Feldman (1926-1987), and Philip Glass (b. 1937), among others. As will be shown, La Barbara's place in music history is significant as a composer, performer, and advocate for the exploration of new timbres and improvisation in the area of classical vocal music. La Barbara has influenced the direction and significance of extended vocal techniques in serious music. She has broadened the sonic palette and worked collaboratively with others to expand previously-set musical boundaries.

CHAPTER 2
REVIEW OF LITERATURE

The history of extended vocal techniques is a long one, yet, as discussed in the previous chapter, it was not until the twentieth century that musicians and composers began to focus on extended vocal techniques with a clear sense of purpose and intent. Joan La Barbara herself did not begin her professional career in sonic manipulation until around 1970. Many sources, particularly those which are general histories of music or which focus on specific musicological topics such as American music or music in the twentieth century, are often written by respected, well-established musicologists, yet, while these authors are extremely well-versed in music history prior to 1950, music composed after this date is generally not discussed in great depth. Even texts that supposedly deal with twentieth-century music are often limited in scope with only cursory examinations given to music after 1950.

This lack of examination may be due in part to the fact that musicologists who choose to write about current trends in music history are faced with an enormous amount of information regarding the composers and performers of this music. Sorting through the tremendous number of essays, articles, and books, and discerning which composers and performers will make a lasting impression on future generations is a daunting task, at best. As is often the case with historians, musicologists often differ in their opinions as to which composers and performers will be recognized by future generations as having the greatest

influence on the music of their time. Questions are raised as to which current trends in music will survive the transition into the future. Many musicologists are faced with making educated guesses as to whose work should be included in current texts dealing with music in the twentieth century.

The concept of extended vocal techniques as an art form of its own is a very recent addition to the musicological fabric. Some musicologists are unaware of this new art form as a growing trend among musicians, and many music historians who are aware of the extended vocal techniques trend are hesitant to suggest that this new art form may have a lasting influence on future music. As a result of this ignorance or hesitancy, sources available for perusal regarding the history of extended vocal techniques and, more specifically, the work of Joan La Barbara are very limited.

The sources examined include general music appreciation books, general histories of music, books about computer and electroacoustic music, and texts that specialize in twentieth-century literature, women in music, and American music. Other literary sources include dictionaries, encyclopedias, dissertations and theses, journals, and magazines that specialize in music history, music performance, or music theory. Also researched were magazines that do not specialize in the musical arts, but sometimes include articles about music within their texts. Internet websites were examined as were recorded informational resources such as oral interviews with Joan La Barbara and the *Lexicon of Extended Vocal Techniques* which was recorded in 1975 by the Extended Vocal Techniques Ensemble at the Center for Music Experiment, University of California at San Diego.

Only scholarly and journalistic sources published after 1970 were reviewed for content regarding extended vocal techniques and the work of Joan La Barbara. Since La Barbara began her professional career around this period , it may be logically concluded that no sources would make mention of her or her work prior to this date. The most current publication reviewed was published in 2002. Resources were also examined for their content in regard to extended vocal techniques in general and well-known artists of these techniques such as Cathy Berberian and Jan De Gaetani. Since the history and nomenclature of extended vocal techniques influenced and are influenced by Joan La Barbara, an examination into any literature regarding this art form was deemed responsible and necessary.

General music appreciation books such as *Music: An Appreciation* (Seventh Edition) by Roger Kamien, *The Development of Western Music: A History* (Third Edition) by Marie K. Stolba, and *The Enjoyment of Music* (Sixth Edition) by Joseph Machlis and Kristine Forney make no mention of Joan La Barbara. Kamien's text draws little attention to extended vocal techniques and female composers, in general. Only a very astute reader would be able to clearly discern that extended vocal techniques are in use in the world of music through the very brief discussion of extended vocal techniques used by George Crumb in his *Ancient Voices of Children*. Stolba's book, while not discussing Joan La Barbara's work, does include discussions on some female composers throughout music history.

Although Joan La Barbara is not named, the Machlis/Forney book does make an admirable mention of three virtuoso women singers of the twentieth century, Bethany Beardslee, Cathy Berberian, and Jan De Gaetani, and their use of extended vocal

techniques. The term "extended vocal techniques" is not used, but a very brief description of some of the techniques used by Beardslee, Berberian, and De Gaetani are noted including sprechstimme, fragmentation, and vocal distortions.

General histories of music such as *A History of Western Music* (Fifth Edition) by Donald Jay Grout and Claude V. Palisca also make little mention of extended vocal techniques. La Barbara is not mentioned at all. In fact, the text places little emphasis on music since 1970, which is approximately when Joan La Barbara began her career as a performer and composer of extended vocal techniques. Although widely used in institutions of higher education, this esteemed general history of music text is noticeably lacking in information regarding the growing trend of extended vocal techniques in art music.

An interesting source of information regarding La Barbara's extended techniques is Joel Chadabe's *Electric Sound: The Past and Promise of Electronic Music*. Chadabe's inclusion of La Barbara, in reference to her influence on electrically-generated sound, gives La Barbara a firm and definitive place in modern music history. Her work is mentioned in reference to the influence her extended vocal techniques and performance abilities have had on the works of composers in the field of electronic and electroacoustic music. Her extended vocal techniques are not discussed in detail. No elaboration is made in defining or describing her techniques, but they are given importance as they apply to the effect the human voice has had on composers of electrically-generated sound. The strength of Chadabe's book in regard to the work of Joan La Barbara lies in his recognition of La Barbara's techniques as an influence in the history of twentieth-century music.

Texts that focus on twentieth-century music literature include Robert P. Morgan's *Twentieth-Century Music: A History of Musical Style in Modern Europe and America*, *Modern Music: The Avant Garde Since 1945* by Paul Griffiths, and Charles J. Hall's *A Twentieth-Century Musical Chronicle: Events 1900-1988*. Morgan's book, part of the Norton Introduction to Music History Series, does discuss extended vocal techniques in Chapter XXI. Although the term "extended vocal techniques" is not used, Morgan writes of Luciano Berio's *Sequenza III* (1966), "Berio extended the boundaries of vocal production considerably beyond those of 'normal' singing."[1] In conjunction with Berio's extended vocal works, Morgan names Cathy Berberian as the producer of the techniques found in Berio's *Circles* (1960) and *Sequenza III*. Incorporated in this chapter are other composers and works using extended techniques including Pauline Oliveros' *Sound Patterns* (1960), John Cage's *Aria* (1958), and Gyorgy Ligeti's (b. 1923) *Aventures* (1962). No mention is made of La Barbara.

Modern Music: The Avant Garde Since 1945 by Paul Griffiths mentions the work of Cathy Berberian, but not Joan La Barbara. Charles J. Hall's *A Twentieth-Century Musical Chronicle: Events 1900-1988* does include La Barbara in the chronicling of twentieth-century musical events listing her date of birth and her occupation as a composer. Due to either the omission of La Barbara's work, as in the case of Morgan's book and Griffiths' book, or the nature of the work, as in Hall's book, none of these works describe or define the extended vocal techniques of Joan La Barbara.

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[1]Robert P. Morgan, *Twentieth-Century Music: A History of Musical Style in Modern Europe and America* (New York: W.W. Norton & Co., 1991), p. 443.

Texts addressing women in music include Jill Halstead's *The Woman Composer: Creativity and the Gendered Politics of Music Composition*. Joan La Barbara is not mentioned in this text. Karin Pendle, the editor of *Women & Music: A History*, includes an article by J. Michele Edwards, with contributions by Leslie Lassetter, which includes La Barbara in the subsection "Sonic Exploration." Extended techniques are labeled as such, and La Barbara is named as one of the leading vocalists of contemporary music. She is further classified as a performance artist, and a brief summary of her work is included in the subsection entitled "Performance Artists" written by Leslie Lassetter.

Cultivating Music in America: Women Patrons and Activists since 1860, edited by Ralph P. Locke and Cyrilla Barr, mentions La Barbara's name once. In an interview by Ralph P. Locke with Betty Freeman, an American patron of art music, Freeman names La Barbara as one of the two American women composers with whose music she is familiar. No mention is made of La Barbara's extended techniques. She is mentioned only in the context of her role as a female composer.

Books on American music include *America's Music: From the Pilgrims to the Present* (Revised Third Edition) by Gilbert Chase. In his text Chase makes no mention of La Barbara. In fact, neither Cathy Berberian nor Jan De Gaetani are mentioned for their work in the area of extended vocal techniques. Extended vocal techniques are not named and are only briefly described in a general discussion of the vocal works of George Crumb.

Perspectives on American Music Since 1950, edited by James R. Heintze, and part of the Essays in American Music Series, edited by Heintze and Michael Saffle, does not include the work of Joan La Barbara nor does Patricia Lust's *American Vocal Chamber*

Music, 1945-1980: An Annotated Bibliography (The Music Reference Collection, Number 4).

Contemporary music dictionaries and encyclopedias do, in general, include La Barbara and her work. Entries on Joan La Barbara are incorporated into such works as *Baker's Biographical Dictionary of Music and Musicians* (Eighth Edition), the *International Encyclopedia of Women Composers* (Second Edition), and the *New Grove Dictionary of American Music*. These resources focus only briefly on La Barbara's life and work in general. Because these informational sources are not devised to provide in-depth explanations of composers and their works, no detailed accounts of her style or techniques are given. The importance of these works is in the recognition of La Barbara as a historical figure in the world of music.

Only one dissertation was located which discussed La Barbara's extended vocal techniques. Entitled *Performance Problems in Contemporary Vocal Music and Some Suggested Solutions*, this work was written by Diane Higginbotham in partial fulfillment of the requirements for the degree of Doctor of Education in Teachers College, Columbia University. In this work, Higginbotham focuses mainly on performance problems singers face when they sing twentieth-century atonal songs, disjunct melodies, octave equivalency, and works which are scored in nontraditional notation. There is, however, a brief discussion of extended vocal techniques in which La Barbara is mentioned twice. It should be noted that Higginbotham incorrectly gave the title of La Barbara's *Circular Song* as *Circles*. Nonetheless, her inclusion of La Barbara in her research further verifies La Barbara's importance in the world of extended vocal techniques.

An examination of music journals revealed little information about Joan La Barbara and her work. Musicological journals such as the *Journal of the American Musicological Society*, *Current Musicology*, *College Music Symposium*, *Music Quarterly*, and the *Journal of Musicology* contain no articles regarding La Barbara's work. Located within the May/1976 publication of the music journal *The NATS Bulletin*[2] is an article about contemporary notation and performance. Jan De Gaetani and Cathy Berberian are both mentioned in regard to their work in vocal music that exceeds the bounds of 'normal' singing, yet Joan La Barbara's name does not appear anywhere within the article.

Publications such as the *Computer Music Journal* and *Musical America* include reviews of La Barbara recordings and performances as does *EAR Magazine* and *Cadence*. *EAR Magazine* also includes some short essays on La Barbara's extended vocal techniques as does the non-musical magazine *Elle*, but these articles are not comprehensive nor all-inclusive. Interestingly, it is the *Village Voice* which contains articles that talk in the greatest depth about Joan La Barbara and her work; however, these essays may be called "cursory" at best.

Websites were investigated as possible plausible sources of information regarding Joan La Barbara and her work. Although La Barbara's name did appear in relation to recording distributors such as Lovely Lady Music, Inc., one of La Barbara's music distributors, the information contained in these websites deals mainly with the biography

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[2]Barbara Kinsey Sable, "On Contemporary Notation and Performance," *NATS Bulletin*, 32:4, May 1976, pp. 26-31.

of La Barbara with only cursory observations made regarding her extended vocal techniques.

Searches for La Barbara in academically-based websites revealed very little information about her work. Very few scholarly works were cited and none were exclusively about La Barbara's extended vocal techniques. Although La Barbara's name does appear in a few academically-related works, such as the above-mentioned dissertation, she is never the focus of such works. Rather her work is mentioned in passing with the bulk of the thesis or dissertation focusing on other aspects or artists of modern vocal art music. A search into the UMI data file revealed that no dissertations on Joan La Barbara and her work have been submitted to this source.

"Extended vocal techniques" did appear on several websites, but, interestingly, La Barbara's name was not included in these Internet sources. The most prolific website on this subject is entitled *New York Women Composers Voice Music*[3] and includes a list of several female composers from New York who utilize extended vocal techniques in their vocal music. The frequent use of "extended vocal techniques" confirms this terminology as the now-accepted nomenclature for vocal techniques that move beyond traditional western art music practices.

Only two oral histories are available for examination. The first is the "Joan La Barbara with Libby Van Cleve" interview from the *Yale Oral History: American Music Series* recorded on February 17, 1998. In this eighty-two page interview Van Cleve talks in depth with La Barbara about her work as a composer and performer. This transcribed

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[3]located at the website elharo@macfaq.com.

text was a superb resource for gaining insight into La Barbara's style, career, and philosophies about contemporary art music.

The second oral interview examined was recorded on May 15, 1991. This interview took place in Santa Fe, New Mexico, between the composer Larry Austin and Joan La Barbara. This source, also, was excellent for its insight into some of La Barbara's compositional techniques, performance practices, and artistic philosophies. It was, however, a more limited resource than the *Yale Oral History* because Austin often directed his questions toward specific works by La Barbara. Much information regarding her compositional techniques and objectives were discussed in reference to these specific works, but little mention was given to her career and place in the history of modern art music.

In both the *Yale Oral History* and the Larry Austin/Joan La Barbara interview there was a noticeable lack of detailed information regarding Joan La Barbara's extended vocal techniques. Occasionally, descriptive narrations about certain techniques took place, but thorough and definitive descriptions about all the techniques La Barbara includes in her sonic vocabulary were not a part of either of these interviews. Still, both of these sources are excellent for their in-depth perspectives into certain aspects of Joan La Barbara's work.

A valuable resource for study was the *Lexicon of Extended Vocal Techniques* recorded in 1975 by The Extended Vocal Techniques Ensemble of San Diego, California and its companion *Index to a Recorded Lexicon of Extended Vocal Techniques*. When cataloguing the extended vocal techniques for inclusion in the *Lexicon*, the Extended Vocal Techniques Ensemble called upon Joan La Barbara for her expertise and

uniqueness in this field. Although her voice was not included in the final copy of the *Lexicon* nor included in its written form, the *Index to a Recorded Lexicon of Extended Vocal Techniques*, her input into the study is verbally acknowledged by members of the Extended Vocal Techniques Ensemble.[4] This *Lexicon* and *Index* are extremely important because they provide the commonly-accepted and commonly-used nomenclature given to the various extended vocal techniques.

The booklet "An Introduction to Extended Vocal Techniques: Some Compositional Aspects and Performance Problems" by Deborah Kavasch gives a detailed description of five extended vocal techniques used in various compositions by six composers including John Anthony Celona, David Evan Jones, Edwin London, Roger Reynolds, Joji Yuasa, and Kavasch. The nomenclature for the techniques discussed was taken from the *Lexicon of Extended Vocal Techniques* and its companion *Index*. As the title states, "An Introduction to Extended Vocal Techniques: Some Compositional Aspects and Performance Problems" not only focuses on the sound production of each technique, but also discusses compositional aspects and performance problems encountered during specific usages of each technique. This work is valuable for the validity it gives to the nomenclature given to extended vocal techniques which appear in the *Lexicon of Extended Vocal Techniques* and to the use of extended vocal techniques as a viable compositional tool in modern western art music.

A thorough examination of music history, music theory, and music performance resources reveals that the use of extended vocal techniques as compositional tools in modern western art music is recognized as valid and that these compositional tools are in

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[4]Edwin Harkins, personal conversation with author on August 3, 2000.

current use. These resources also recognize Joan La Barbara as a composer and performer of extended vocal techniques. Her influence in the history of art music, however, is not examined in texts that are used by academicians of music in higher education. In fact, there is little discussion of her work and importance in the world of classical art music. With the exception of the oral histories, none of the music resources examined gave thorough or complete insights into Joan La Barbara's music, techniques, or music philosophies. Because it has been established that extended vocal techniques are now a part of modern art music, the role Joan La Barbara has played in securing the position of these new techniques in the compositional and performance areas needs to be more precisely defined and widely recognized by art music performers, composers, and music scholars.

CHAPTER 3
THE EARLY CAREER OF JOAN LA BARBARA: HER EXTENDED TECHNIQUES DEFINED

Joan La Barbara was born Joan Linda Lotz in Philadelphia, Pennsylvania on June 8, 1947. Before the age of four she began singing in children's choirs at Lutheran church services, and she began piano lessons with her grandfather around this age. She states, " . . . my mother remembers that I announced to her, when I was quite young, that I was going to be a singer--I guess, based on how much I enjoyed singing in church choirs, and doing solos, and things like that."[1] She began formal piano lessons around the age of four-and-a-half or five at a music school in the Philadelphia area, but was moved by her mother to a private teacher, Louise Christine Rebe. Rebe was a composer who taught La Barbara some of her own piano compositions. La Barbara recalls that Rebe did not, however, encourage her to compose her own works; nonetheless, the example was set for a young La Barbara that women were composers in their own right.

Before she entered junior high school she began to gain a sense that the piano was her friend, "as some thing that I could go to and share something with. Then it would give back to me in a way that was strangely nonjudgmental and supportive."[2] La Barbara's sense of a relationship with an instrument would manifest itself in a work written for Joan

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[1] Joan La Barbara with Libby Van Cleve, New York City, February 17, 1998 (*Yale Oral History, American Music Series*, Interview no. 275 a-f), p. 1.

[2] Ibid., p. 3.

Tower entitled *Responsive Resonance with Feathers* (1979). In this work a voice tape plays within the body of the piano on small speakers set inside the instrument. The voice on the tape contains singing, laughter, and shouting. The piano part is a mixture of playing inside the piano and playing on the keys. To play inside the piano the musician will sometimes hold down the pedal on the piano and play something that will resonate inside the piano. The work also requires the performer to strum or pluck the strings with an ostrich feather, although a fingernail or guitar pick could be used. The concept of the piece is to have the performer create a work in which the piano resonates back to the musician in a responsive manner. There is to be an interaction between the performer and the instrument. In its use of the body of the piano, this work in not unlike Gyorgi Ligeti's *Aventures*, premiered by Phyllis Curtin, one of the voice teachers La Barbara studied with during her college years.

La Barbara began her college vocal studies with Helen Boatwright at Syracuse University from 1965 to 1968. When she began attendance at Syracuse University she was dually enrolled as an English major and a music major. She was fond of writing poetry, yet her singing career would steer away from an emphasis on text toward a lifelong study of nontextual sounds. Boatwright would have a strong influence on La Barbara both as a musician and a performer, in regard to stage presence. In high school La Barbara had studied drama. She states, "I love the theater. I think, in a way, that's really my first love . . . I love being on stage."[3] It was Boatwright who made La Barbara more aware of her stage presence. Boatwright also made La Barbara more aware of contemporary ideas in music. Boatwright, herself, premiered works by her contemporaries including Paul

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[3]Ibid., p. 8.

Hindemith's (1895-1963) *Das Marienleben* (1948), and this example would help influence La Barbara in her own choice to work with contemporary composers.

During this time La Barbara also came in contact with composer Franklin Morris who had set up an electronic music studio at Syracuse University. La Barbara was allowed to experiment with an early Moog synthesizer, and, while she did not consider herself a composer, she did produce a few rudimentary tapeworks. Her works were not performed, but, under Morris' tutelage, she was able to witness electronic music events. This interest in electronic music would later influence her experimentations with extended vocal techniques and her compositional style.

Another influence on La Barbara's musical interests was Phyllis Bryn-Julson, another student of Boatwright's at Syracuse University. It was, in fact, Bryn-Julson who persuaded Boatwright to take on La Barbara as a student. After leaving Syracuse University, Bryn-Julson performed with many contemporary composers including Gunther Schuller and Arthur Weisberg. Bryn-Julson worked with Weisberg's group, Contemporary Chamber Ensemble, and La Barbara attended many performances of this contemporary music ensemble. It was also during this time that La Barbara came to hear recordings of Cathy Berberian performing Luciano Berio's works for extended voice.

From 1967 to 1968 Joan La Barbara studied with Phyllis Curtin at the Berkshire Music Center at Tanglewood and with Marion Szekely-Freschl at the Juilliard School in New York. She eventually transferred to New York University where she studied music education and received her Bachelor of Science degree in 1970. Like Boatwright and Bryn-Julson, Curtin and Szekely-Freschl would influence La Barbara through their willingness to perform modern works by living composers. Szekely-Freschl was a

contemporary of Bela Bartok (1881-1945) in Hungary, and she encouraged La Barbara to work with living composers to help them understand how to write for the voice.

Phyllis Curtin premiered Gyorgi Ligeti's work *Aventures*. *Aventures* is a work for instruments and three singers and requires that the singers have a tremendous range, acute perfect pitch, and the ability to create non-idiomatic sounds. Within the work the singers are directed to sing into the body of the piano while the sustain pedal is engaged. The search for new timbres permeates Ligeti's work. As mentioned previously, La Barbara's work *Responsive Resonance with Feathers* incorporates this use of the body of the piano found in Ligeti's composition from 1962. It seems logical to deduce that La Barbara's interest in searching for new vocalized sounds stemmed from her work with such innovative singers and musicians as Boatwright, Bryn-Julson, Morris, Curtin and Szekely-Freschl.

La Barbara also became interested in jazz, especially during her final year at New York University. She was drawn to the improvisational nature of performance, and it was at this time that La Barbara began to notice that there were instrumentalists who were experimenting with new timbres. She realized she wanted to do this with her voice, so she began to work with jazz and fusion musicians, imitating instrumental sounds. She attended open sessions at the WBAI Free Store where she could improvise with other musicians such as Anthony Braxton, Fredric Rzewski, Michael Sahl, and Jay Clayton. Rzewski was instrumental in analyzing her improvisational work forcing her to think about the theoretical constructs of jazz as well as the structural designs.

In 1970 she met Steve Reich (b. 1936) through Michael Sahl. Reich was developing a piece called "Drumming" and was looking for singers who could imitate the

sounds of instruments. Reich decided that La Barbara would imitate the sound of the marimba, and she was accepted into his group, Steve Reich and Musicians. Her work on "Drumming" included creating patterns with the other musicians based on improvisations taken from interlocking tape loops created by Reich. Reich would listen to the patterns created by the other musicians in his group and decide which patterns would be notated for retention and which would be discarded. He also created patterns of his own which he directed the other musicians to imitate. The compositional process was one of experimentation with Reich maintaining complete control over the entire process.

In 1972 she co-founded the New Wilderness Preservation Band with Charlie Morrow, Bruce Ditmas, Carol Webber, and Rich Cook. They created improvisatory pieces in which La Barbara was able to explore her own ideas about voice extensions. La Barbara writes, "All of my "extended vocal techniques" were developed as a result of improvisation, sometimes with other musicians, and as a result of responding to experimental situations or to stimulti [sic] from other media or ideas."[4] It was during a taped rehearsal session with the New Wilderness Preservation Band for a series of concerts done at Washington Square Church in New York City in the early 1970s that La Barbara discovered her ability to create multiphonics. Describing what happened when listening to the rehearsal tape after the session in which she was responding vocally to a reading by Armand Schwerner of "Mila Repa" from the *Tibetan Book of the Dead*, she writes, " I found myself producing a low, guttural sound, very deep and peaceful. I continued with the sound in direct response, without analyzing what I was doing. . . . I realized that I was generating two tones simultaneously, one an octave below the other.

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[4] Joan La Barbara, e-mail interview with author on February 17, 1999, p. 1.

Sometimes, an additional tone was emitted, a fifth below the octave."[5] After repeatedly listening to the tape she was able to analyze and eventually recreate the multiphonics. Her use of multiphonics has remained a constant throughout her musical career and has come to be known as one of her signature sounds.

Her work with Reich began to come to a close in late 1972 or early 1973 when she began to work with Philip Glass. She continued to work with Reich until 1974, but Reich was not comfortable with La Barbara working with both him and Glass, so she made the decision to record "Drumming" and "Music for Mallet Instruments, Voices, and Organ" with Steve Reich and Musicians and then began her work with Glass. Reich's discomfort with La Barbara's work with Philip Glass stemmed from his perception that music critics were not able to differentiate between Glass' and Reich's compositional styles. Although some male performers in Reich's group also worked in Glass' ensemble, Reich felt that because La Barbara was a female she was more visible and, therefore, more likely to be used as justification for many critics' determination that Reich and Glass were writing the same style of music.

La Barbara's work with Glass was more improvisational in style than her work in Reich's group. Whereas Reich was searching for specific timbre effects, Glass allowed La Barbara to experiment with timbres, creating whatever timbres she felt lent credence to the composition. La Barbara believes she taught Glass what the voice can physically do in a minimalistic setting regarding the number of repetitions possible without fatigue to the vocal chords. Yet, because Glass allowed her to choose her own timbres within his compositions, La Barbara believes Glass did not take as active an interest in vocal timbre

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[5] Ibid.

effects in music as did Reich. When she left his group in 1976, Glass did not continue to pursue vocal timbre effects in his work.

Glass also gave La Barbara great flexibility in performing solo concerts on nights when his ensemble did not perform. This flexibility allowed La Barbara to pursue her interest in composing and performing her own works. In 1974 La Barbara composed "Voice Piece: One-Note Internal Resonance Investigation."

This work was composed by La Barbara as a study of resonance focusing. Most singers are taught to generate a sound which consists of the blending of resonance areas to create a pure "golden" tone which has come to be known as the "bel canto" style of singing. "Voice Piece: One-Note Internal Resonance Investigation" explores timbre in a way conventionally not recognized by most classically-trained singers. It also allows the singer to work in an improvisatory manner, choosing a comfortable pitch which will allow the singer to place that pitch in the maximum number of resonance areas. Specific note values are not given in the score, rather general timing instructions are given to be implemented at the singer's discretion.

"Voice Piece: One-Note Internal Resonance Investigation" is a composition in which the performer focuses a single tone in various locations in the skull and chest areas. No vibrato is to be used. "The sound is to be clear, clean and specific."[6] The score for "Voice Piece: One-Note Internal Resonance Investigation" includes techniques for performing overtone focusing, isolated harmonics, and multiphonics. These techniques are performed either as closed-lip sounds or open-lip sounds.

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[6] Joan La Barbara, "Voice Piece: One-Note Internal Resonance Investigation," copyright 1975, p. 1.

The score itself is unusual in its notation. Because the focus of the work is on timbre within a single note setting, traditional notation is rendered unserviceable; therefore, La Barbara set about to create a visual guide to assist the performer in interpreting the structure of the work. Handdrawn silhouettes are used within which are placed markings to indicate the position of the resonance cavities utilized in the composition. Below each figure La Barbara names the resonance cavity position. Further instructions are written out as to the sequential order of and options available for performance. An approximate duration value for performance of the work is given as between twenty and twenty five minutes in length. Further instructions are given as to the mood the work should evoke. All directions and explanations are given in English. On the following page is an example of La Barbara's score for "Voice Piece: One-Note Internal Resonance Investigation."

This work was her first published composition and premiered on December 9, 1974 at St. Mark's Church in New York City. The work was copyrighted in 1975 with a final version completed on August 23, 1976. "Voice Piece: One-Note Internal Resonance Investigation" was recorded by La Barbara on the album *Voice is the Original Instrument* in 1976.[7] The work is to be performed for amplified voice alone and is described by La Barbara as "an early, rigorous minimal etude."[8] It's purpose, according to La Barbara, is to establish the techniques of resonance singing as specific compositional tools. Through this work La Barbara established herself as a composer and performer of extended vocal

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[7] Joan La Barbara, *Voice is the Original Instrument*, Wizard Records RVW-2266, 1976.

[8] Joan La Barbara, e-mail interview with author on April 10, 2000, p. 1.

open lips, separate sounds:

repeat these in series (figure A):

"Voice Piece: One Note Internal Resonance Investigation" copyright Joan La Barbara 1975.

techniques, particularly in the area of multiphonics, overtone focusing, and resonance focusing. These techniques remain a cornerstone of her sonic vocabulary.

The techniques studied by La Barbara in "Voice Piece: One-Note Internal Resonance Investigation," namely overtone focusing and multiphonics, rely on overtones and subtones which are produced from the sounding of a single note. Not normally heard as individual tones within the series of tones generated by the production of a note, La Barbara has been able to isolate some of these secondary tones and accentuate them to the point that the root of the harmonic series no longer overpowers the listener's ears. Instead, emphasis is placed on the overtones and subtones, creating new techniques of sound generation for composers and singers.

For Joan La Barbara overtone singing may be also described as overtone isolation. The root of the pitch is established by the singer and then by shaping the mouth and refocusing the tone into specific mouth, cheekbone, nose, forehead, and eye regions, as outlined in "Voice Piece: One-Note Internal Resonance Investigation," the listener's ears are drawn to the overtone or overtones produced. La Barbara intentionally begins to focus on the overtone or overtones produced, redirecting the sound focus away from the root of the overtone series.

Multiphonics produced by La Barbara differ greatly from those normally heard throughout world music. La Barbara, a soprano, produces a comfortable mid-range note and then, through relaxation, generates a tone an octave below that pitch. Sometimes La Barbara is also able to generate a tone a fifth below the octave subtone. Her relaxation technique, in sum, creates subtones. In the multiphonic singing found in Tuvian throat singing and the chanting of certain sects of Tibetan monks, the sounds are produced by constricting the throat muscles to accentuate overtones within the harmonic series of a given pitch. While this technique produces a sound similar to La Barbara's multiphonics, the Tuvian throat singers do not create subtones. Because the singers in these groups tend to be male, the root of their overtone focusing falls within the male vocal range, which is often at least an octave below La Barbara's soprano range. Thus, while the sound they produce is similar to La Barbara's sound, the technique used to produce the tones is based on building the sound from the root upward rather than from the root downward as La Barbara does when she produces multiphonics.

The relaxation technique employed by La Barbara to produce multiphonic tones requires that the singer's voice be amplified. She notes, "It cannot be "projected" other

than by using a microphone. Trying to "project" the sound makes it disappear."[9] She explains that it is possible, by shaping the mouth, to also produce reinforced harmonics above the multiphonic sound. Thus, La Barbara is able to simultaneously produce multiphonics and overtones from a single root pitch. La Barbara's use of multiphonics is flexible and varied. In accordance with the desired sounds called for within a composition, she blends her tones as the Tuvian throat singers and Tibetan monks do, or she isolates overtones.

These are difficult techniques to produce in a concert setting. They require intense concentration as well as extreme relaxation. La Barbara believes that the degree of difficulty in producing these techniques prevents many singers from performing pieces that call for them and inhibit many composers from including them in their compositions. However, not all composers shy away from using these techniques. In 1979 Morton Subotnick included multiphonics in his work "The Last Dream of the Beast," and this work is the first to use multiphonics on specific pitches. Charles Dodge incorporated the technique in his 1984 work "The Waves."

La Barbara has composed many works that require the use of multiphonics including her 1978 composition *Chandra*. In this work for solo voice, five male singers or male chorus, and chamber orchestra, the male singers are required to produce multiphonics. The success of producing multiphonics in live performance is described by La Barbara as precarious, at best. Of one performance in May of 1978 with the Nord Deutsche Rundfunk Orchestra and Chorus she writes, "The sound more often produced by the male singers was a kind of growl or vocal fry, rather than the pure

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[9]Joan La Barbara, e-mail interview with author on February 17, 1999, p. 1.

multiphonic."[10] La Barbara, herself is much more sure of her ability to produce multiphonic tones on cue. Her dedication to perfecting the technique and years of performing the technique in concert allow her to produce at least two simultaneous tones with much assuredness.

In 1974 La Barbara also created the work *Hear What I Feel* for solo vocalist with assistant. This work is based solely on improvised sound and is a continuation of La Barbara's interest in the exploration of new vocal timbres. The composition requires that the solo vocalist be blindfolded and seated before a table upon which six small clear-glass dishes have been placed. In each of the six containers the assistant has placed a different material. The materials have been selected by the assistant and are unknown to the performer. The materials should be of varied textures, but should not include items that crawl or will injure the performer in any way. The performer then touches the material in a single container and responds vocally to the material found there. The response should reflect the inner feelings the performer encounters upon touching the material in the dish. The object of the composition is not to identify the materials found in the dishes, but to react to the touch of the various materials. The responses should be freely produced, reflecting a complete investigation of the material contained in the dish. The performer then proceeds from left to right through the series of dishes, reacting to each material as it is fully examined.

Of the work La Barbara writes,

> "*Hear What I Feel*" [sic] is a search for new sounds. During a series of concerts with poets and writers I discovered some unusual sounds by reacting emotionally to the words and letting the emotion rather than the intellect direct

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[10]Joan La Barbara, e-mail interview with author on February 17, 1999, p. 2.

> the sound. Continuing my experiments in finding new ways to inspire unorthodox sounds, I decided to delve into the area of psychology and place myself in an extraordinary situation. The visual sense is one of my strongest needs. . . . I chose to block that sense, depriving myself of the visual stimulation and/or information in order to heighten the reactions of my other senses. For concert situations I spend one hour in isolation with my eyes taped shut, also denying my hands any sensation other than that of air and dust. I prefer to spend that hour in a space outside the concert room in order to include the discovery of new surroundings as part of the piece's sound and to experience the shock of suddenly bringing the solitary state of mind, created by being alone with one's own thoughts, into a space occupied by other people and respond to this without the advantage of visual information. The piece involves vocalizing my immediate responses to touching a variety of unknown substances, chosen by persons other than myself. I do not know what the materials are until the end of the experiment when I remove the tape from my eyes.[11]

Beyond producing a vocal response to tactile observations, *Hear What I Feel* is an attempt to communicate. When Andy Aldrich, her assistant at the Mills College performance on October 18, 1975, observed that the sounds produced by La Barbara really meant to him the things he had chosen La Barbara wrote, "Success! That has been the point of the piece all along . . . to communicate from one being to another through sound. Sensory information passed through the medium of sound. Language without words."[12] Not only is the search for new sounds a goal of the work, but also the desire for preverbal communication.

Sitting in the composer's living room listening to an unpublished recording of a performance of *Hear What I Feel* revealed many sounds that may only be described as "primal" in nature. Guttural sounds, gagging sounds, and choking sounds raised a strong

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[11]Joan La Barbara, "Excerpts from program notes," *Hear What I Feel: Journal Notations and Thoughts, October 1975, April 1976*, copyright Joan La Barbara, 1976, p. 2.

[12]Joan La Barbara, "Notes for "HEAR WHAT I FEEL," October 19, 1975, San Francisco," *Hear What I Feel: Journal Notations and Thoughts, October 1975, April 1976*, copyright Joan La Barbara, 1976, p. 2.

internal, physical response. No knowledge of what material was contained in the dishes nor any visible cues were available, yet the sounds alone were able to communicate La Barbara's response to the things she was touching.

Witnessing a blindfolded performer being led out onto the stage and willingly allowing herself to be in an extremely vulnerable position, not only as a sightless person willing to touch unknown objects, but also as a performer willing to allow the public to hear her instinctive responses, actually heightens the listeners' response to the work. Composer Laurie Spiegel attended a performance of La Barbara's *Hear What I Feel* and later commented that "it was so emotional that it made her cry."[13]

La Barbara made notes about her performances of *Hear What I Feel*. In her notebooks she wrote of her thoughts during the hour before performances, what substances were chosen, her thoughts during the performances, and her thoughts after the performances. These journals are as yet unpublished; however, a study of some of the journal notes done in the composer's home in Santa Fe, New Mexico, during August, 2000, revealed that La Barbara had a heightened sense of sound, touch, and smell during her blindfolded hour before a concert and during the concert itself in which she remained blindfolded. The value of being sightless for an hour before a concert and during the concert itself allowed La Barbara to explore her reactions to touch in a primal way. She writes,

> I remember from the January 15 concert (Washington Square church [sic], NYC) that the chicken livers produced a wonderful sound, deep and guttural and that I explored the substance with my fingers, digging through with my thumbnails and thumbs. When I removed the tape and discovered what it was

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[13]Joan La Barbara with Libby Van Cleve, New York City, February 17, 1998 (*Yale Oral History, American Music Series*, Interview no. 275 a-f), p. 26.

> I realized that I had done something I would never do had I known what the thing was . . . I would be too civilized. I had transcended from civilized, inhibited being to primitive explorer, using what senses I had available.[14]

La Barbara explored new sounds by allowing herself to be free from societal and personal restraints. She stretched the boundaries of human sound during the creation of a serious art music piece. This intense search for raw sound left La Barbara feeling exposed and extremely vulnerable. She discovered that it was a place too personal to continue to share with the public, and so she stopped performing the work.

In 1979 La Barbara renewed her search for uninhibited sound in a work called *Performance Piece*. Conceived in 1974 and premiered in California in 1979, *Performance Piece* is a stream-of-consciousness work in which La Barbara vacillates between pure sound and thought. As ideas come to her during performance she voices them aloud whether they are pure sound or linguistic thoughts. She seeks to express her thought process unedited. As in *Hear What I Feel*, *Performance Piece* exposes the innermost thoughts and expressions of La Barbara to a public audience. This vulnerability allows La Barbara to explore new vocal timbres and modes of self-expression and share her findings with an audience. The vulnerability of expressing her true thoughts in a public forum again proved too intense for La Barbara, and she found that she could not allow herself to be seen in such an unprotected manner for great lengths of time. Once the core of her inner being was discovered and explored, she turned away from such intense scrutiny and continued her exploration of new sounds in less vulnerable settings.

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[14]Joan La Barbara, "October 26, 1975, New York," *Hear What I Feel: Journal Notations and Thoughts, October 1975, April 1976*, copyright Joan La Barbara, 1976, p. 3.

Both *Hear What I Feel* and *Performance Piece* appear to be totally improvised works; however, both compositions are performed under strict criteria. The parameters for each piece are very specific and controlled. In regard to both works La Barbara states, "The outline of what the task was was very specifically described and delineated, so that it wasn't a completely free improvisation. It was very, very much about exploring a particular thing."[15] Improvisation is used as a tool for timbre production rather than its traditional use as a tool for harmonic structure or melodic shape. Through these works La Barbara strengthened her ability to improvise timbre, and this characteristic--improvisation of sound itself within given parameters--remains in much of her music.

In 1975 La Barbara wrote "Circular Song " which she premiered in December of 1975 and recorded on *Voice is the Original Instrument* in 1976. "Circular Song" is an etude in circular singing. Circular singing is an extended technique La Barbara often uses to create vocal glissandi based on the instrumental technique, i.e., circular breathing as done by wind players. Circular singing requires the performer to sing on the inhale as well as the exhale. Because it is not possible for a singer to create sound without a break, as is possible instrumentally, La Barbara strives for a sound that is pure. In a 1991 interview with composer Larry Austin La Barbara states, " . . . in those glissandi the sound should be absolutely pure."[16]

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[15]Joan La Barbara with Libby Van Cleve, New York City, February 17, 1998 (*Yale Oral History, American Music Series*, Interview no. 275 a-f), p. 47.

[16]Joan La Barbara with Larry Austin, Santa Fe, New Mexico, May 15, 1991.

The technique, like so many other of La Barbara's extended vocal techniques, requires relaxation. The singer should breathe from the stomach area rather than from the chest or shoulder areas. The intake of air should be slow and controlled. La Barbara states, "It's just breathing. And it's just making sound as you breathe. And the gentler you can feel about it the better you'll do it."[17] Once the technique is mastered, emotion, dynamics, and vibrato can be added to varying degrees.

The score for "Circular Song" consists of written instructions as well as a diagram utilizing symbols to depict when inhaled and exhaled sounds should be produced and when descending or ascending notes should be used. The score itself places the various symbols in a circular pattern further representing the concept of completing a circle back to its starting point. The score appears on the following page.

The vocal range of the work is not specified in the work, but is dependent upon the vocal range of each individual performer. The range is to fall not at the extreme ends of a singer's possible range, but rather should fall within the topmost and bottom-most comfortable points of the vocal range. The overall focus of the composition should be on timbre rather than specific pitches. In her score to "Circular Song" La Barbara writes, "Singer should be conscious of top and bottom range points and think of entire range as a sound spectrum, gliding through vocal colors and softening range breaks."[18] The work requires stamina and vocal control for successful execution, and breath control is extremely important. The climax, or midpoint, of the work calls for the use of a

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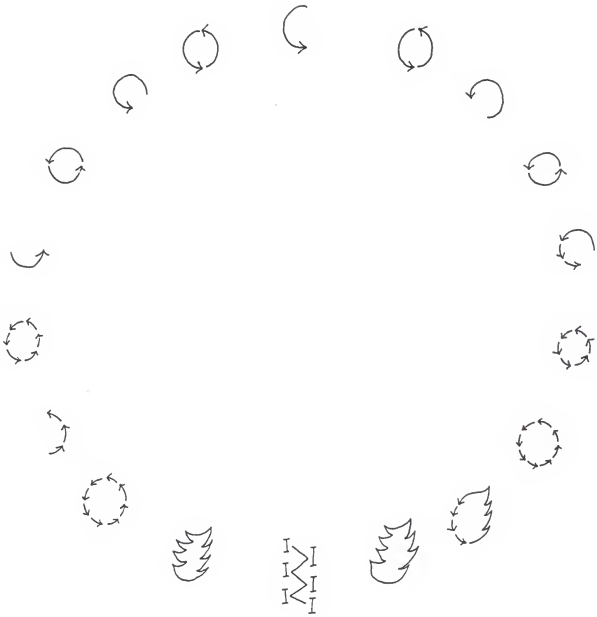
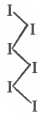
[17]Ibid, p. 19.

[18]Joan La Barbara, "Circular Song for amplified voice alone," copyright Joan La Barbara 1976, p. 1.



"Circular Song" copyright Joan La Barbara 1975.

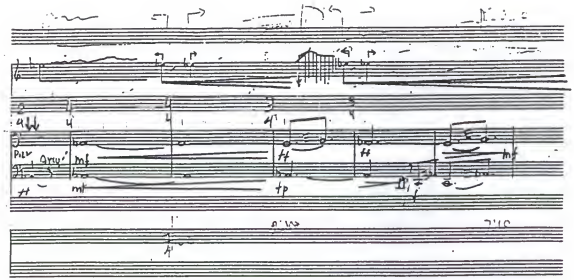
multiphonic and is indicated by the following symbol created by Joan La Barbara:



The "I" symbol represents the split tones and the alternating lines represent the breathing pattern which begins at the bottom of the range and moves slowly toward higher pitches as the breath is inhaled and exhaled.

Circular singing has become one of Joan La Barbara's signature sounds, and she uses it frequently. It appears in some of her early compositions such as "Cathing" (1977), "quatre petites betes" (1978-79), and *Twelve for Five in Eight* (1979). Other composers, such as Morton Subotnick, have also incorporated La Barbara's circular singing in their own works.

Subotnick uses circular singing in his composition "The Last Dream of the Beast." Subotnick requires a more pronounced inhaled/exhaled style of singing than La Barbara uses in her own compositions. While she generally strives for a smoothness of tone, Subotnick wants to create a sound in which the effort of the technique, or the physicality of the sound, is made obvious. In essence, Subotnick builds on La Barbara's original technique to create his own timbre effect, one that is suited to reflect his personal choice for tone color within a work. Following is an excerpt from Subotnick's "The Last Dream of the Beast." The arrows above the notes pointing to the left indicate inhaled notes and the arrows pointing to the right indicate exhaled notes. The lightly handwritten notations above the score are La Barbara's personal production notations.



"The Last Dream of the Beast" copyright Morton Subotnick 1979.

Early in her career La Barbara began to use ululations in her work. Ululations are rapid tremolos that La Barbara initially called "vocal flutters." After a trip to San Diego in the mid-1970s to visit members of the Extended Vocal Techniques Ensemble, La Barbara adopted the terminology of the Extended Vocal Techniques Ensemble and renamed her technique "ululations." Ululations appear in world music, especially in Middle Eastern countries, but La Barbara discovered ululations through her own experimentation and was unaware of their use in other cultures. Of her extended techniques that resemble vocalizations found in other cultures La Barbara writes, "This may sound naive at this point in time, but please try to remember that we're talking about 25-plus years ago and access to world music was not as prevalent as it currently is."[19]

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[19]Joan La Barbara, e-mail interview with author on February 17, 1999, p. 2.

La Barbara discovered ululations through her attempts to imitate birds and uses ululations in different registers to created varying effects. She states, "Ululations can be comfortable, i.e., part of the mid-range sonic fabric; decorative, i.e., part of the upper register fabric; or stressful, i.e., part of the extreme upper range."[20] They appear in early works such as "quatre petites betes," "Klee Alee" (1979), and *Twelve for Five in Eight*. On the following page is an excerpt from *Twelve for Five in Eight* in which ululations are notated as wavy lines. The opening instructions indicate that the ululations are to be extremely high-pitched at the third octave above middle c, and the length of the line of each ululation indicates the approximate length of each vocal gesture.

Ululations appear in Morton Subotnick's "The Last Dream of the Beast" and, as was in the case of multiphonics, this work was the first to use ululations on specific pitches. The ululations are used in the extreme upper register to create a stressful effect within the work. Following is an excerpt from "The Last Dream of the Beast." It should be noted that Subotnick notates the ululations as wavy lines beside the pitches on which the ululations are to be sung. The lightly handwritten notations above the score are La Barbara's personal production notations.

Glottal clicks are a "creaky door" sound that is produced by inhaling while singing. The exhaled version is called a vocal "fry." La Barbara does not remember the specific moment of discovery of these techniques, but believes they were a vocal reaction made during improvisations to a percussive sound, or possibly to a trombone "fwap." For her, the ingressive glottal clicks are more controllable, that is, she can slow down or separate the clicks with more precision than when producing the fry.

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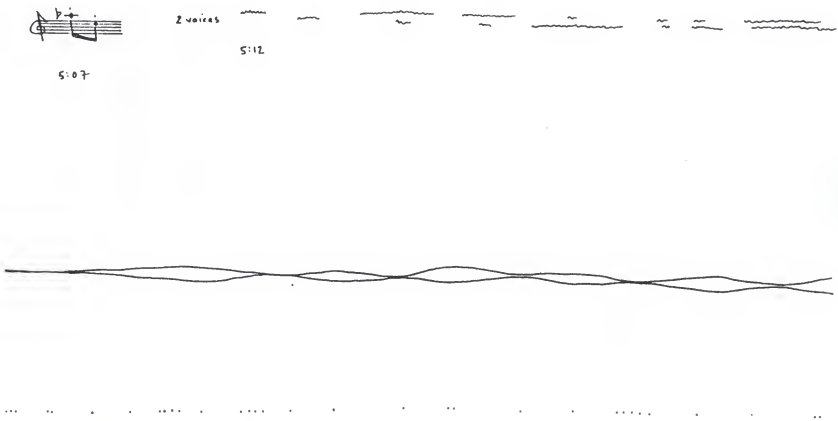
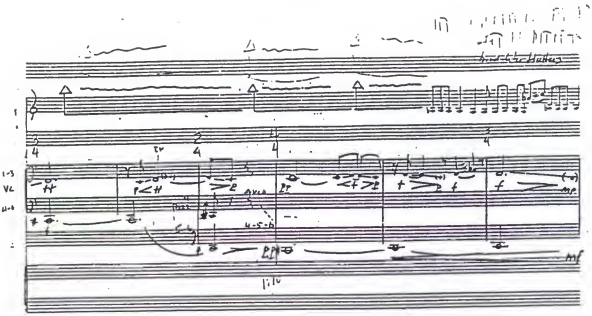
[20] Ibid., p.1.



Twelve for Five in Eight copyright Joan La Barbara 1979.



"The Last Dream of the Beast" copyright Morton Subotnick 1979.

Glottal clicks abound in La Barbara's music, both as a composer and as a performer. Describing the technique La Barbara writes, "This technique is marvelously effective and quite striking when amplified."[21] La Barbara uses glottal clicks in many of her early works including "Cathing," "Autumn Signal" (1978), and *Twelve for Five in Eight*. The excerpt on the following page is taken from the score for *Twelve for Five in Eight*. It shows glottal clicks represented by small "x"'s with a horizontal line through them followed by a series of dots.

Because egressive glottal clicks, or vocal fry, and multiphonics are both produced in the upper part of the throat, and multiphonics are very difficult to master, many performers producing these effects interchange these techniques. Whereas La Barbara is able to produce either sound at will, performers who are not as well trained as she is in producing these sounds often unintentionally produce the vocal fry rather than the

[21] Joan La Barbara, e-mail interview with author on February 17, 1999, p. 2.

1 voice

:45

1:15

1 voice
(sibilants)

:55

1 voice

inhaled
throat clicks

:38

start at rapid rate, gradually slowing to single clicks with long silences between.

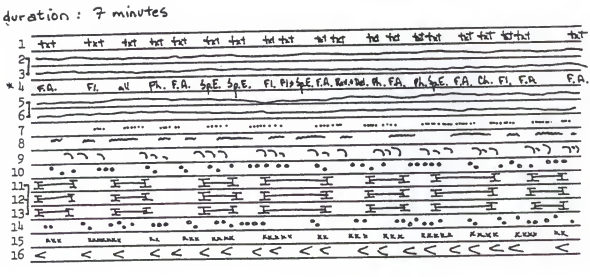
Twelve for Five in Eight copyright Joan La Barbara 1979.

multiphonic. As previously mentioned, five male vocalists who were required to produce a multiphonic in a May, 1978, performance of La Barbara's work *Chandra* were, at best, only able to produce a vocal fry rather than a pure multiphonic. La Barbara herself produces a vocal fry when she begins to produce her multiphonic extended technique. Unlike many singers, however, La Barbara is able to leave the vocal fry and produce a pure multiphonic.

Tongue clicks and snaps, too, appear in the early compositions of Joan La Barbara. Tongue clicks are produced in the back of the mouth by pressing the midpart of the tongue against the upper part of the palate and then rapidly pulling the tongue away from the upper palate. The speed and volume of the clicks are easily controllable due to the muscular nature of the tongue. Tongue snaps are produced by placing the front part of the tongue against the roof of the mouth and rapidly pulling the tongue down into the jaw. As in the tongue clicks, the speed and volume of the tongue snaps are controllable.

Found in the composition *Cathing*, the tongue clicks and snaps are notated as "x"s in the score. Their rhythmic nature adds a sense of vocal percussion to the work. The score is written out as sixteen tracks of sound to be recorded and mixed into a final recording. The tongue clicks and snaps are notated on track fifteen. The score appears on the following page.

Rhythmic breathing is another extended vocal technique La Barbara has used in her compositions throughout her early career. European art music does not recognize rhythmic breathing as a desired vocal timbre. Classically-trained singers are traditionally taught breath control as a means for controlling the volume and duration of sound.



Cathing copyright Joan La Barbara 1977.

Breathing is not to be heard "as its perception is an undesired reminder of the singer's body and of the sensuality of sound."[22]

In her composition "Autumn Signal" the inhalation and exhalation of breath is used as one layer of sound within a multilayered setting. She uses rhythmic breathing as a timbre effect to complement the other extended vocal techniques within the work. The very nature of rhythmic breathing gives a sense of a regularly recurring rhythmic pattern to the composition not through percussive vocal effects, such as tongue clicks and snaps, but through the listener's own natural response to hearing someone breathing. The listener instinctively interacts with the rhythmic breathing by allowing their own breathing pattern to imitate the pattern occurring in the composition. Of all the extended vocal techniques

[22]Isabelle Deconinck, "Bodyvoices: David Moss/Joan La Barbara," *EAR*, 15:37, March 1991, p. 41.

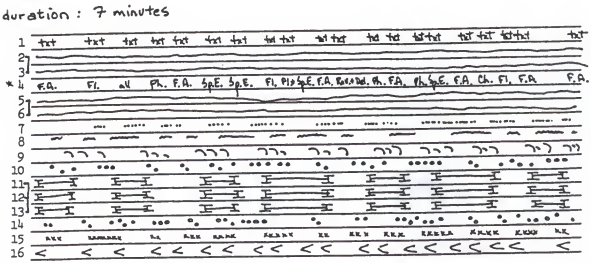
used by Joan La Barbara, rhythmic breathing is the one most easily reproduced by the listener.

Pure tones are nonvibrato tones that are used extensively by Joan La Barbara. While pure tones are used frequently in world music, in the realm of European art music and opera they are not considered desirable tones on long-held notes. La Barbara incorporates them into most of her early compositions, and they are used in a variety of ways. Frequently, they are used in conjunction with other extended techniques, particularly multiphonics, circular singing, resonance focusing, and overtone focusing, but they are also used alone to create melodic or harmonic timbres within her compositions. In her composition *Twelve for Five in Eight* La Barbara requires the singers to produce only pure tones throughout the work.

The composition "Klee Alee" is a prime example of La Barbara's use of pure tones in a variety of ways. The technique is used while La Barbara is extending her voice using resonance focusing and overtone focusing. Pure tones are also used independently to shape the contour of the harmonic background of the work. The resonance focusing, overtone focusing, and independent pure tones are layered into the work and often occur simultaneously or in pairs.

In the composition "Cathing" La Barbara uses pure tones in conjunction with circular singing and multiphonics. In tracks two and three in the following example, La Barbara's score reflects her use of two single circularly-sung pitches microtonally separated to create beats between the two sound waves. Tracks five and six represent two microtonally separated long-held pitches used to harmonize with the tones produced on tracks two and three. Tracks eleven, twelve, and thirteen represent multiphonics. All

seven tracks occur simultaneously, and the pure tones are stacked on each other to create a full, rich texture.



"Cathing" copyright Joan La Barbara 1977.

Joan La Barbara's early career as a composer and performer of extended vocal techniques was a career spent in experimentation and the perfecting of these techniques. La Barbara worked to create an audience for her newly-devised extended vocal techniques. She garnered not only the attention of the public, but of composers who were her contemporaries. Composers such as Steve Reich and Philip Glass encouraged her to experiment with non-traditional vocal timbres in their own compositions. Other composers, such as Morton Subotnick and Charles Dodge, incorporated extended vocal techniques into some of their own compositions. These experimentations combined with her own compositions which explored non-traditional sounds culminated in a standardization of Joan La Barbara's extended vocal techniques as her early career came

to a close. By the end of the 1970s, Joan La Barbara had carved a niche for extended vocal techniques in the language of contemporary classical music.

CHAPTER 4
THE MATURE COMPOSITIONAL STYLE OF JOAN LA BARBARA

The 1970s were marked by Joan La Barbara's search for new sounds culminating in the standardization of specific sounds that she could generate with confidence by the end of the early part of her career. The early 1980s marked the beginning of the mature compositional style of Joan La Barbara. Her repertoire of extended vocal techniques was firmly set in her sonic vocabulary. Throughout the 1980s and 1990s La Barbara would use the extended vocal techniques she had perfected to create various compositions which reflected her continuous desire to incorporate extended vocal techniques into the traditional western classical vocal style.

As a composer La Barbara often uses improvisation as a compositional technique. When she begins work on a piece she will first explore her feelings about the subject she is engaging. La Barbara uses stream of consciousness, verbal writing, and lists of words and thoughts that come to her regarding the idea or topic she wants to explore. She will then allow the words to take her into sound to see what kind of sound ideas are inspired or generated by those verbal thoughts. Sometimes she will make drawings to see if shapes or gestures grow out of her ideas, and then she will attempt to create those shapes and gestures with her voice. Some of her works are process-oriented, but many others are story- or emotion-oriented.

Three works from La Barbara's mature period of composition will be examined to explore her use of extended vocal techniques and her compositional style. The three compositions include "Erin" (1980), "Time(d) Trials and Unscheduled Events (1984), and "to hear the wind roar" (1991). These works were chosen for the accessibility of their recorded performances and/or scores. All three, with the exception of "to hear the wind roar" which contains percussion instruments, are purely vocal works. Similarities and differences in style of composition for the three works will be examined to determine if Joan La Barbara's mature compositional style bears an overall compositional design.

"Erin" was commissioned by VPRO Radio and recorded in Hilversum, Holland in May of 1980. It is included in the collection *Sound Paintings.*[1] The liner notes for "Erin" read, "Inspired by a photograph of a father carrying the coffin of his son, a member of the IRA who died during the hunger strike, "Erin" creates an imaginary vision of Ireland, a fantasy blending playful and sombre reveries, Joycean characters, conversations and folklore with the discovery of language, all ending in a rich, multiphonics choir, a dirge for the fallen."[2] The work contains no instrumentation and all vocalizations were recorded in real time with no electronic manipulation of the sound. There are no dynamic shifts in the work other than those produced through the changing thickness of vocal events, and these changes produce dynamic fluctuations which are hard to discern. La Barbara does not use dynamics as a compositional tool in this work.

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[1]Joan La Barbara, *Sound Paintings*, Lovely Music, Ltd., LCD 3001, New York, New York, 1990.

[2]No author is given for the liner notes to *Sound Paintings*, but it may be deduced from the use of "I" in the notes on the last page that La Barbara herself wrote all the liner notes for the collection.

"Erin" opens on rapidly repeated high notes on the text "mi." Several layers of the "mi" text occur on various pitches. La Barbara quickly begins layering exaggerated inhalations, a form of rhythmic breathing, into the sonic fabric. Nontextual pitches are added followed by the inclusion of ululations. The entire block of sound is focused in the upper soprano register. The thickness of this block of sound is thinned to a layer of inarticulated speech on notes in the lower range of the soprano register. In the lower range long notes are intertwined with shorter note values to create a polyphonic block of sound. Grunts in the lower register and inarticulated speech on mid-range notes are added along with traditionally-sung notes to create a complex sonic fabric. The texture thins to traditionally-sung notes which are presented as a duet and then trio. This passage serves as a transition to the next section of the work.

La Barbara begins the new section of the work on the articulated sounds "wa-ta-na-pay" which are repeated twice. The articulated sound "toe" is added to the original phrase creating "wa-ta-na-pay-toe" which is repeated twice. The syllable "fi" is added to the growing phrase. "Poe" is tacked on the phrase followed by "ta," then "poe" is included again as the phrase is stretched to be sung as "wa-ta-na-pay-toe-fi-poe-ta-poe." The gradual addition of syllables to the growing phrase are very much in the minimalist tradition and can be easily traced back to La Barbara's earlier work with the minimalists Steve Reich and Philip Glass. The minimalist phrasing is abruptly interrupted by a layered multiphonic chorus.

The multiphonic chorus is created by the simultaneous sounding of multiphonics on adjacent notes, and La Barbara uses professional mixing techniques to create the chorus of multiphonic sound. Overtone and resonance focusing are interspersed among

the multiphonic tones enhancing the tonal sonorities heard in this expansive block of sound which encompasses nearly half of the entire composition. It is interesting to note that La Barbara discovered the multiphonic technique while responding to a reading of the "Mila Repa" from the *Tibetan Book of the Dead*, and she uses it here as a requiem for a fallen IRA member. It is as if the technique has come full circle as a response to death. La Barbara ends the multiphonic chorus to return to the minimalistic phrase "wa-ta-na-pay-toe-fi-poe-ta-poe " performed once in its entire syllabic form with the addition of a "nay" at it's conclusion.

"Erin" may be described as flowing blocks of sound that, at first, isolate the high, low, and middle registers of the soprano range. The multiphonic chorus heard at the end of the work combines all the registers of the soprano voice into a single block of sound. La Barbara also alternates multi-layered textures with single-line textures in dramatic sectional shifts creating contrasting sections of music which work to emphasize the varying thicknesses of each block of sound within the sonic fabric. La Barbara's compositional style within this single work may be described as horizontal blocks of sound based on pitch register layered upon vertical blocks of sound based on thickness of sonic fabric. The multiphonic chorus near the conclusion of the work combines these two elements expanding both the vertical and horizontal blocks of sound to their fullest potential within the soprano range, and through multiphonics expands the soprano range to encompass the bass through soprano range of the human voice. The final syllabic reprise of the minimalistic phrase is in high contrast to the multiphonic chorus and serves to emphasize the juxtapositioning of textures and registers that occur throughout the work.

"Time(d) Trials and Unscheduled Events" was commissioned by the Independent Composers Association as one of six works composed for the radio series "Sound in Motion" which was broadcast during the 1984 Olympics Arts Festival in Los Angeles. The work is an aural description of Olympic athletes in motion based on filmed motion studies of the athletes. The work appears in two versions. The original 1984 version consists of eight layers of La Barbara's voice recorded on tape and incorporates multiphonics, resonance and overtone focusing, and circular singing. La Barbara developed a solo performance version of the work during a series of concerts with the Esbjerg Ensemble in Denmark in October 1986, and the work was revised and rescored in 1987 for six to eight solo voices without tape at the request of Ed Cansino for I Cantori. The final version includes the extended vocal techniques found in the original version and adds vocal fry, ululations, and microtonal tuning to the score.

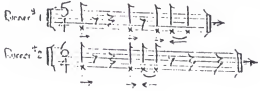
The athletes represented in the final version of the score are long distance runners, sprinters, divers, swimmers, pacers, shot-putters, weight-lifters, and included are La Barbara's representations of crowd noises. Extended techniques are used to depict the sounds the athletes make when they are in the heat of competition. Grunts, glissandi, vocal fry, multiphonics, microtonal tuning, ululations, and rhythmic breathing are used to represent the various athletes. The score indicates that all sung tones should be clear, pure tones. Vibrato is not used. The entire score is set to stop watch timings and the quarter note is to be kept constant throughout the work.

La Barbara opens the work with rhythmic breathing in five-four time. Rhythmic breathing is used throughout the work to represent runners, and different time signatures and tempi used to project the various breathing patterns of short and long

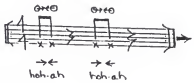
distance runners. The opening rhythmic pattern in five-four time is to be maintained throughout most of the work. Rhythmic breathing in six-four time is added representing a second long distance runner. A third long distance runner is represented in four-four time. Finally, a sprinter is added who pants with irregular accents in no established meter. These four voices together create an ostinato polyrhythm over which the other voices/athletes enter and exit as their "events" are enacted by the singers. The example on the following page is taken from the score and shows the four breathing patterns as they occur simultaneously in the composition.

At 1 minute 10 seconds a fifth voice enters depicting a diver. La Barbara gives a detailed graphic of how extended vocal techniques are used to aurally create the motions of a diver as she dives into the water, swims up from the bottom of the pool, swims across the surface to the stairs, and exits the pool to the crowd's applause. This entire section is centered around f-natural in various octaves according to what is happening during the athletic event. A descending glissando is used to represent the diver making the dive. A vocal fry that leads into a multiphonic represents the diver swimming to the surface after the dive. Two singers are used to create microtonal singing which represents the diver swimming across the surface of the pool to the stairs. In her instructions La Barbara explains that each of the two voices should use a very pure "oo" sound. The voices should deviate from each other by an extremely small increment so that acoustic beats occur. La Barbara reminds the singers that the closer together the voices are, the slower the beats will occur. In this manner the singers can control the aural depiction of how quickly the diver kicks her legs to get across the pool. Rising ululations are used to represent the diver exiting the pool to the crowd's applause. On the same page in the score, La Barbara

Patterns continue throughout with new interlocking relationship each repeat



add:
Runner #3



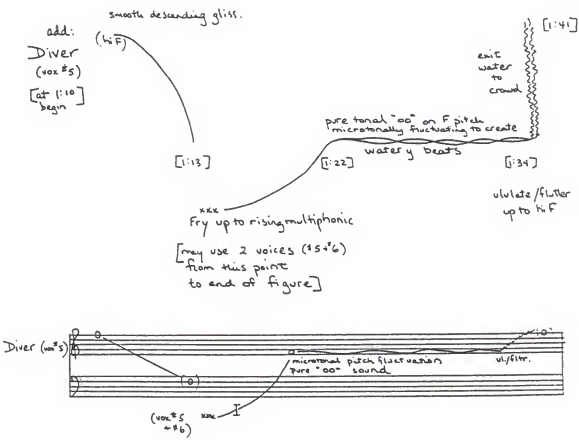
[fade in at about :30]

add:
Sprinter (rec #4) [fast panting with irregular accents]

[fade in at :42 out at :58]

"Time(d) Trials and Unscheduled Events" copyright Joan La Barbara 1987.

places the graphic on a grand staff to show the exact pitches used in the vocal depiction of the diver. The following example is taken from La Barbara's score.



"Time(d) Trials and Unscheduled Events" copyright Joan La Barbara 1987.

At 1 minute 53 seconds two voices enter together using rhythmic breathing to represent pacers. Both voices breathe in five-four time using the same breathing pattern. Unlike the other breathing patterns used up to this point in the score, the two pacers are given actual pitches on which to breathe. The first pacer vacillates between b-natural and b-flat while the second pacer vacillates between f-sharp and f-natural. La Barbara's fluctuation between f-sharp and f-natural and b-natural and b-flat serve as embellishments

to the b-flat pitch center in this section, much as Mozart or Beethoven would use a grace note to accent the principle note within the melodic line. Notice that the relationship between the two notes is that of a perfect fourth with the dominant tone placed beneath the root of the tonality. The use of a pitch center which becomes the dominant to another pitch center when the work's tonality modulates is a compositional tool La Barbara uses throughout "Time(d) Trials and Unscheduled Events." She has created a quartal sonority. At 2 minutes 3 seconds in the score six voices are using rhythmic breathing simultaneously. Different meters, patterns, and tempi are used by the vocalists. The various rhythmic patterns used by the vocalists reflect a return to a polyrhythmic texture similar to the one La Barbara introduced at the beginning of the work.

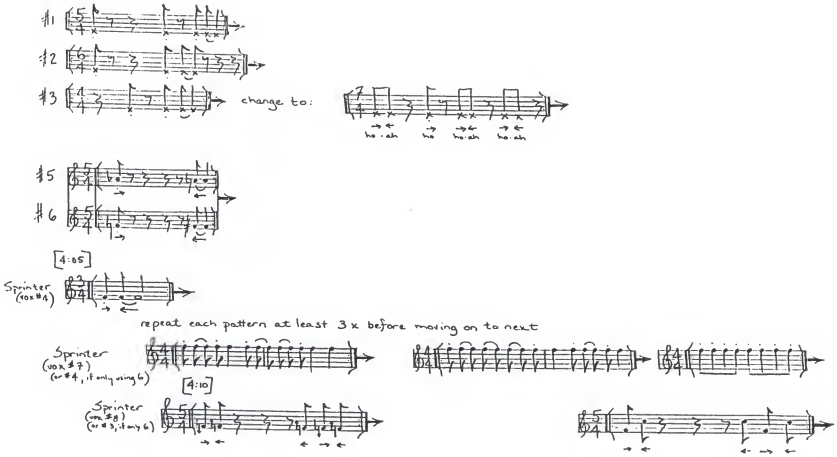
At 2 minutes 20 seconds and 2 minutes 21 seconds two voices enter representing divers. The second voice's entrance follows the first entrance after a one second delay to create a cascading effect. The rhythmic breathing patterns of the runners established earlier are heard while the two divers' voices perform on the f-natural pitch, which serves as the dominant note of the b-flat pitch center.

At 3 minutes La Barbara introduces a sprinter who pants in staccato triplets on f-natural. Shortly thereafter a second sprinter is introduced into the score who is to breathe on f-natural an octave below the first sprinter. The first pacer's pitch is lowered from b-natural/b-flat to a-natural/a-flat. The relationship between the two voices is lowered from a perfect fourth to a minor third. La Barbara has modulated from a quartal sonority to triadic harmony. Her use of triadic harmony is further reinforced by the introduction of a sprinter on f-natural and a sprinter who alternates between f-natural and c-natural. The listener now hears triadic harmony that fluctuates between f major and

f minor. At this point in the composition eight voices are performing simultaneously in various rhythmic patterns creating a polyrhythmic texture firmly established around f-major/f minor tonalities. On the following page is an excerpt from the score which shows the eight breathing patterns performed simultaneously in triadic harmony.

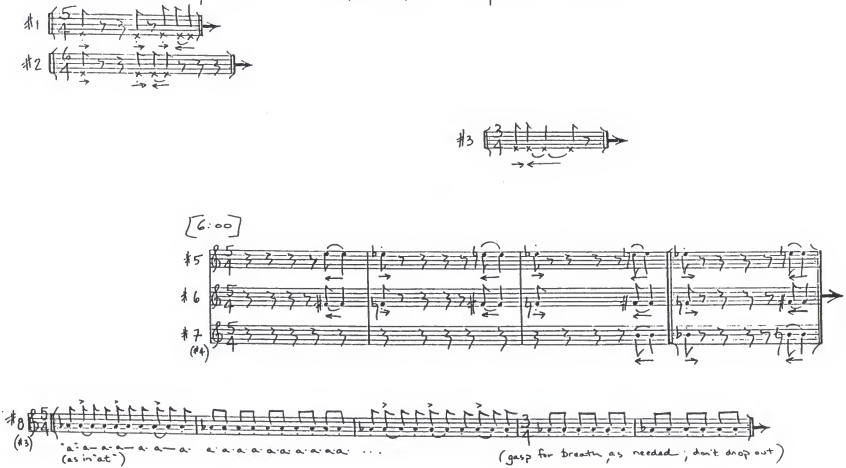
La Barbara continues the runners' and divers' events until 5 minutes 20 seconds when all rhythmic breathing and extended vocal techniques stop or fade as each voice represents either a shot-putter or weight-lifter through growls and grunts. Each voice is written in five-four time, but each voice has its own rhythmic pattern. Dynamics come into play during this section of the composition as different voices crescendo during this part of the score. Each of the eight voice parts are placed on a specific pitch in the score. While no clef is designated in the score, it may be assumed that since La Barbara is a soprano the voices are scored on e-natural, g-natural, and b-natural forming an e minor triad.

At approximately 5 minutes 57 seconds the first two voices simultaneously resume the rhythmic breathing of the long distance runners heard at the opening of the work. Three pacers and a sprinter are introduced into the score soon thereafter. Two pacers are given a pitch center which focuses on e-flat with b-flat acting as the dominant placed a fourth below the root. The third pacer and the sprinter are given another pitch center which focuses on f-natural with a-flat placed a third above the f-natural. La Barbara is simultaneously using quartal sonorities and triadic harmonies. The placement of the e-flat in the highest position draws the listener toward the e-flat tonality. Following is an example of La Barbara's use of a quartal sonority in combination with triadic harmony. The other voices reintroduce the rhythmic breathing using staggered entrances,



"Time(d) Trials and Unscheduled Events" copyright Joan La Barbara 1987.

Runners #1 & #2 immediately reintroduce breath patterns, as if they had never ceased.


#1
#2
#3
[6:00]
#5
#6
#7
(#4)
#8
(#3)
"a-a-a-

and two "Fancy Divers" appear in a final round of competition. To represent the "Fancy Divers" the glissando used by each vocalist is to be more elaborate than the glissandi used by the earlier divers' voices. The pitch center of the divers is f-natural, but this pitch center is obscured by the e-flat pitch center of the pacers' breathing patterns. The work ends with the rhythmic breathing patterns of eight runners until all voices end abruptly on an inhaled breath at 8 minutes.

"Time(d) Trials and Unscheduled Events" can be seen as a polyrhythmic/polytextural work which opens on an f pitch center, modulates to a b-flat pitch center, and concludes on an e-flat pitch center. It includes both quartal sonorities and triadic harmonies. The simultaneous use of different breathing patterns in different meters to represent runners or shot-putters and weight-lifters is certainly polyrhythmic in construction. La Barbara weaves together glissandi, vocal fry, multiphonics, microtonal pitch fluctuations, and ululations to create the aural image of divers performing athletic events over rhythmic patterns aurally representing runners. Various rhythmic patterns representing shot-putters and weight-lifters also work to create a multi-layered piece which is typical of La Barbara's compositional style.

Unlike "Erin" which may be described as homogeneous sections linked together through abrupt or subtle transitional sections, "Time(d) Trials and Unscheduled Events" actually layers unrelated musical events on top of each other, just as running races, diving competitions, and field events are unrelated to each other even though all of them are athletic events. Polyrhythms are accentuated using angular, multiple rhythmic breathing patterns over which are placed improvisatory-like extended vocal techniques. The placement of distinct and accentuated rhythmic patterns against smooth-flowing extended

vocal techniques creates a heightened sense of contrast between the two musical events occurring simultaneously in the composition. This placement of extended vocal techniques over polyrhythms creates a polytextural composition rather than a polyphonic composition. The difference between the two terms being defined as strong rhythmic patterns over which are placed definitely-pitched extended vocal techniques (polytextural) rather than two or more melodies sounded simultaneously (polyphonic.)

Another notable aspect of La Barbara's compositional style is the use of contrasting sections within this work. The terse transition between the runners/divers section and the shot-putters and weight-lifters section, and the abrupt return to the concluding runners/divers section, serves to accentuate the contrast between the two sections. The use of this compositional tool is common to both "Erin" and "Time(d) Trials and Unscheduled Events," and the latter work may be described as ternary in form.

In both "Erin" and "Time(d) Trials and Unscheduled Events" La Barbara uses a layering technique to create her compositions. The use of this compositional style, however, differs between the two pieces. In "Erin" La Barbara layers extended vocal techniques which blend together to create sections which are heard as blocks of sound. La Barbara does not seem to be striving to blend extended vocal techniques into a single block of sound in "Time(d) Trials and Unscheduled Events." Rather, she seeks to create a sense of many events occurring simultaneously, and she makes no attempt to blend the extended techniques into a homogenous whole. Her compositional technique in "Time(d) Trials and Unscheduled Event" is similar to the compositional style of Charles Ives, who often layered unrelated musical events in a single work. Like Ives, La Barbara requires the

listener to be able to focus on two or more musical events simultaneously while perceiving the overall intention of the work.

"To hear the wind roar" was commissioned by the Center for Contemporary Arts of Santa Fe, I Cantori, and The Gregg Smith Singers. The commissioning of "to hear the wind roar" was made possible by a grant from Meet the Composer/Reader's Digest Commissioning Program, in partnership with the National Endowment for the Arts and the Lila Wallace-Reader's Digest Fund. In 1991 La Barbara created "to hear the wind roar" as a work for multiple voices and hand-held percussion in three versions. One version is for small vocal ensemble, one is for full chorus, and one is for solo voice and tape. The ensemble version was premiered by I Cantori on May 9, 1992 at Occidental College in Pasadena, California. The full chorus version was premiered by The Gregg Smith Singers at the Adirondack Festival of American Music on July 18, 1992. The solo version was premiered by Joan La Barbara on August 8, 1992 at The Center for Contemporary Arts in Santa Fe.

In the score of "to hear the wind roar" La Barbara writes,

> When I turned 39 I took up downhill skiing and reaped the unexpected pleasure of the incredible, magical sound at 12,000 feet in the snow-the precious silence, the crack and snap of the snowfield, the gentle ticking of ice-covered branches, the wind whistling through pine needles. I knew I wanted to translate that experience into a vocal piece, blending some of my "extended" techniques with more traditional singing.[1]

The score includes two- to five-line staves and unlined staves for sopranos, altos, tenors, and basses. Clefs are notated, but neither key signatures nor time signatures are inserted. When lined staves are used, pitches are notated by the placement of each

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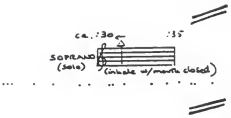
[1]Joan La Barbara, "to hear the wind roar," copyright 1991, in *Contemporary Anthology of Music by Women*, edited by James R. Briscoe (Bloomington: Indiana University Press, 1997), p. 98.

extended technique on a line or space of the staff. Located in the score are unlined-staved sounds associated with the percussion instruments and some extended techniques. Some extended vocal techniques are used in both lined- and unlined-staved sections.

Duration of note values constantly change throughout the work. The opening tempo indication, notated at the beginning of the score, places the quarter note value at forty two on the metronome. There is a tempo change after the first section of the piece, and here La Barbara increases the tempo indicating that the quarter note be placed at sixty on the metronome. The third section is performed at a rapid pace as La Barbara increases the tempo of the quarter note to one hundred twenty on the metronome. There is a shift to seventy two for the quarter note with a return to one hundred twenty approximately halfway through the work. As the composition begins its conclusion, La Barbara slows the tempo down to sixty and concludes the work at a slow marking of forty for the quarter note value. The overall effect of the tempo variations is that of the wind speeding up then fading away, and La Barbara uses the changes in tempo effectively.

Stopwatch timings are not used in the score in the same manner they are used in La Barbara's other compositions. In this work La Barbara denotes only six specific stopwatch timings.They are approximate, and they range from five seconds to three minutes. Only the first stopwatch timing gives any indication of where the technique should be performed in the timeline. This timing occurs on the first page and appears in the score as follows:



"to hear the wind roar" copyright Joan La Barbara 1991.

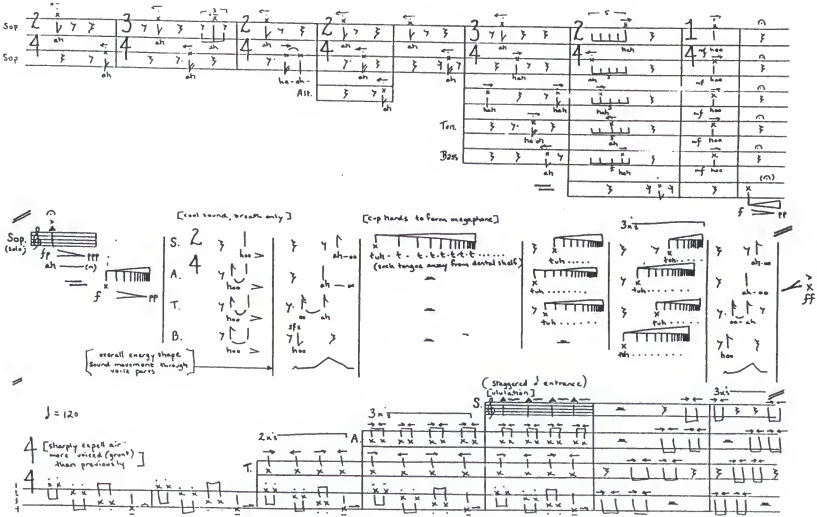
The last page of the score contains detailed instructions which guide the performers through the extended vocals used in the composition. Some of the extended vocal techniques used by La Barbara in this work are inhaled sounds, ululations, overtone focusing, rhythmic breathing, glottal clicks, tongue snaps, and multiphonics. Unusual or accentuated articulations of sounds are also used such as extended passages on the "f," "w," "m," "n," and "s" sounds found in the English language. The umlauted "u" found in the German language is also incorporated. Sounds are to be created in both the open- and closed-mouth positions, although most sounds occur in the open-mouth position. Percussion instruments include the rachet, clave, clapstick, Tibetan cymbal, rainstick, egg (filled with beads or stones,) rattle, and c# crotale, and they are played by the singers. La Barbara clearly indicates in the score where the rachet, clave, clapstick, rainstick, and crotale should be heard. There are no markings in the score placing the egg, the rattle, or the Tibetan cymbal. She does not indicate whether these instruments are optional or should be used at the singers' discretion. Of all the scores examined, this is one of the few times that La Barbara fails to provide clear instructions for the performance of her work. The following is an excerpt taken from the instruction page.

ref: p.- 4 -
energy shape indicates envelope of energy for entire chorus
part indication should provide movement of sound through group

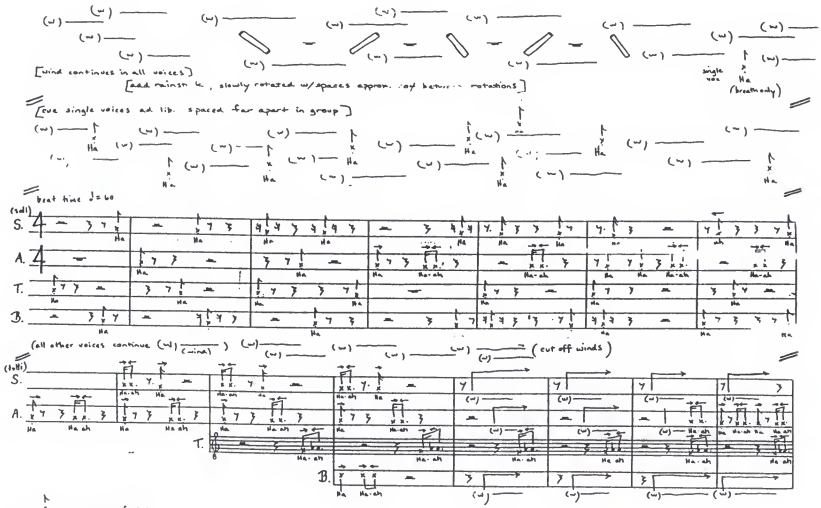
place tongue in position to form "l"
move tongue back (away from teeth) until it reaches back of
first upper dental shelf
drop or suck tongue away from dental shelf on "tuh"
= slow to fast repetition of sound

"to hear the wind roar" copyright Joan La Barbara 1991.

The work is centered around articulated sounds produced by rhythmic breathing. The entire composition seeks to recreate the sound of the wind, and La Barbara effectively uses egressive and ingressive sounds to aurally depict the movement of wind over a given landscape. Most of the sounds are breathy in nature, and even where pitches are notated, the characteristics of these sounds are not tonally based. The opening texture of the composition is thin, focused on a single sound produced by the rachet. A solo voice is added, and La Barbara begins to layer sounds on top of each other using staggered entrances. The texture of the work gradually increases in thickness, then abruptly thins only to gradually increase again. This pattern of gradually increasing the sonic fabric recurs frequently and is reserved for the vocal sections of the work. At no time in the composition does La Barbara use this technique with the percussion instruments. Their role is a subordinate one. They are used only to enhance or accentuate the vocal effects. On the following pages are two examples taken from La Barbara's score. They illustrate the consistency with which La Barbara uses the layer-building technique as a compositional tool in this work.



"to hear the wind roar" copyright Joan La Barbara 1991.

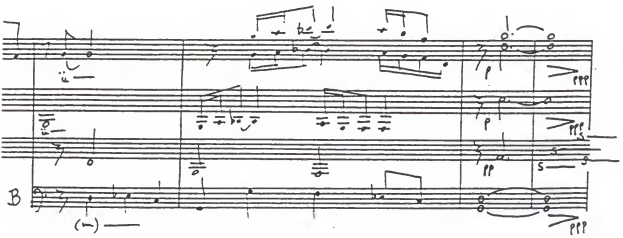


"to hear the wind roar" copyright Joan La Barbara 1991.

Although the composition is founded on various articulations of breathing sounds, imbedded in the work are various melodic passages. The passage occurring in the first half of the work is the most complex of the melodic sections and is worthy of examination. In this section there is a recurring melodic passage and a specifically-pitched ostinato which occur alone and together. They are to be first performed by solo singers and later by groups of singers. The ostinato is sung in an alternating ingressive and egressive pattern, and La Barbara instructs the performer to sing the ostinato in a breathy fashion. The dynamic markings of the ostinato range from mezzo piano to piano. The melodic passages are based on the same melodic pattern which is rhythmically varied. The first occurrence of the melodic passage is marked mezzo forte, and is sung on the umlauted "u" found in the German language. La Barbara notes that it is to be sung as a lament. Interspersed between the first presentation of the ostinato and melodic passage are articulations on the "s" sound heard in the English language, and they serve as a transition between the two passages. After the initial presentations of the two patterns, La Barbara layers them on top of each other in a closed-mouth articulation using piano and pianissimo dynamic markings. The ostinato pattern is then heard alone performed in alternating clefs then sung jointly in the soprano, alto, tenor, and bass lines. More voices are added to each line to create an increasingly thicker texture. The melodic pattern is then isolated and presented in canonic style. The voice parts are added cumulatively, culminating in a six-voice texture. This is another example of La Barbara's use of layer-building as a compositional tool. The two upper voices articulate the umlauted "u" while the two lower voices perform on a closed-mouth "m." The soprano voice performs at a piano dynamic level while the lower three voices perform at a pianissimo level. The final chord requires the soprano and alto

voices to articulate their final note at a piano level under which the tenor and bass perform at a pianissimo level. All voices fade to a pianississimo level.

The rhythms used in this passage are especially interesting to note. La Barbara places quick-moving sixteenth-note and eighth-note rhythms in the upper two voices over a slow-moving half-note rhythm in the tenor. The bass moves in quarter-note values. Although the melodic pattern remains the same, the use of different rhythms for each voice in the final appearance of the melodic passage are highly reminiscent of the rhythmic patterns found in the Franconian motets of the thirteenth century. The following example shows La Barbara's final presentation of the above-described melodic section.



"to hear the wind roar" copyright Joan La Barbara 1991.

Like "Erin" and "Time(d) Trials and Unscheduled Events" La Barbara constructed "to hear the wind roar" by layering extended vocal techniques on top of each other. Whereas the layering technique in "Time(d) Trials and Unscheduled Events" was used to represent unrelated musical events simultaneously, in "to hear the wind roar" La Barbara

layers closely-related techniques in order to represent a single event that occurs over the passage of time. Most of the extended vocal techniques used in the work are based on rhythmic breathing and were chosen for their sounds' proximity to sounds that occur in nature, i.e. the wind. Similar to "Erin" in its use of vertical blocks of sound, "to hear the wind roar" does not, however, mirror "Erin" in the way the blocks of sound are woven together. Unlike "Erin," La Barbara uses smooth transitions between the blocks of sound used in "to hear the wind roar." There is a cohesiveness that unites the different sections of the composition into a coherent whole. Articulations on "s" and "w" often serve as transitional devices between sections as do inhaled and exhaled breaths. Even when melodic passages are used they are accompanied by breathy sounds, or they fall within a very soft dynamic range.

The dynamics used in the vocal sections of the work never go beyond the mezzo forte range, and this marking is used only once in the first melodic section. The nature of the sounds themselves dictate that dynamics in the piano and softer ranges be used. Within this limited dynamic range, La Barbara constantly shifts between dynamic levels, recreating the constantly changing intensity of the wind. The dynamic levels of the instruments range from fortissimo to pianissimo. With the exception of the opening rachet part, the instruments do not sustain their tones over long periods of time. The loud dynamic levels they produce, therefore, do not affect the overall dynamic level of the work. The overall dynamic effect of the work may be described as soft with an undulating dynamic line. This is the first work examined in which La Barbara consistently uses dynamics as a compositional tool.

Joan La Barbara's mature compositional style used in her extended vocal techniques songs is one that is constantly evolving. There are elements to her compositional style that are constant and used regularly as writing tools. La Barbara utilizes a layering technique to build her compositions. There are extended techniques that she uses with consistency including multiphonics, ululations, rhythmic breathing, and resonance and overtone focusing. She uses traditional and nontraditional types of scoring in each work to represent her intentions. La Barbara, however, uses these various elements in ways that differ from piece to piece.

"Erin," "Time(d) Trials and Unscheduled Events," and "to hear the wind roar" all were composed using a layering technique; however, the way she uses the layers of sound in the sonic fabric differs from piece to piece. In "Erin" La Barbara created two different blocks of sound. She built horizontal blocks of sound based on pitch register and layered these blocks on vertical blocks of sound creating a thickness of sonic fabric that constantly changes. By combining these different blocks of sound in a multiphonic chorus she was able to expand both types of blocks into an all-encompassing sonic fabric. In "Time(d) Trials and Unscheduled Events" La Barbara pieced together unrelated musical events to create a polyrhythmic and polytextural work. "To hear the wind roar" is a composition consisting of layers of extended vocal techniques which blend together to produce a concerted whole. Transitional passages are used to move between different sections within "to hear the wind roar," yet in "Erin" La Barbara uses transitional passages inconsistently and omits them entirely in "Time(d) Trials and Unscheduled Events."

In each of the compositions, La Barbara utilizes the extended vocal techniques in very different ways. "Erin" reflects her use of extended techniques to create flowing

blocks of sound of varying thickness which are placed in contrasting sections united by dramatic sectional shifts. "Time(d) Trials and Unscheduled Events" was built on unrelated extended techniques layered on top of each other. The sonic fabric reflects La Barbara's emphasis on combining irrelative musical events into a polytextural composition. In "to hear the wind roar" she intentionally chose extended vocal techniques which are focused in rhythmic breathing. When she does incorporate more tonal techniques she requires the singers to perform them in a closed-mouth position or at a low dynamic level. She often combines the breathy and tonal techniques to obscure the pure tones and reinforce the sounds based on rhythmic breathing.

The scores for "Time(d) Trials and Unscheduled Events" and "to hear the wind roar" reveal La Barbara's continuing search for a written musical language that represents her intentions. Staves are present in both scores and key signatures are omitted. Whereas time signatures and a timeline are used in "Time(d) Trials and Unscheduled Events," "to hear the wind roar" is based on metronomic beats per quarter note. Graphics are present in both scores, and detailed performance instructions are frequently inserted above and below staves. Both scores contain an instruction page describing how certain techniques are physically performed and/or the desired effect the technique should produce. Ululations are consistently represented by small wavy lines. La Barbara is consistent in her representation of ingressive and egressive sounds. Both scores use small arrows pointing to the left or right to represent ingressive and egressive sounds, respectively. Singers must carefully read La Barbara's handwritten instructions to ensure that they are performing the correct extended technique.

The three works examined here reflect Joan La Barbara's skill at writing music based on extended vocal techniques. While all three works are built on these techniques, she uses them differently in each work illustrating the versatility with which extended vocal techniques can be incorporated into vocal compositions. Her scores act as guides for the performers and listeners, and they reveal the complexity involved in writing music which uses extended vocal techniques. These compositions reveal La Barbara's dedication to promoting the use of extended vocal techniques into the traditional western classical vocal style.

CHAPTER 5
SOCIAL, POLITICAL, AND CULTURAL CHANGES THAT INFLUENCED JOAN LA BARBARA'S WORK AS A FEMALE COMPOSER AND PERFORMER

To understand Joan La Barbara's place in the history of music it is necessary to review the role of women musicians throughout the history of music. Until the 1980s, although active throughout music history, women composers and performers were not usually the subjects of books written about music. Their acknowledged place in music history was cursory, at best. Since the mid-1980s there has been an increasing number of books and journal articles written about women musicians and about gender differences in teaching and writing about music. As will be shown, social, political, and cultural changes in American history since the 1960s have allowed composers like Joan La Barbara to pursue musical careers on their own terms.

The website of the International Alliance for Women in Music,[1] with more than 4500 pages of archival resources, is one of the most comprehensive compilations of bibliographical sources related to women's studies, gender studies, and feminism in regard to women musicians. The dates listed in the thousands of entries reveal that the study of the role of women in music began in earnest in the mid-1980s, and the majority of works were written after 1990. As the titles of the books and articles written about women musicians reveal, women have been very active in composing and performing throughout

[1]located at http://www.iawm.org

music history, but their contributions to the field of music have not been acknowledged until quite recently. While these changes in music research have not influenced La Barbara's compositional style nor her explorations into extended vocal techniques, this recent devotion to bringing the music of women to the forefront of scholarly research will enable researchers to make known to a wide audience Joan La Barbara's contributions to the field of music.

Sociological studies also confirm that the role of women in music has only recently become a topic of scholarly discussion. Many of the sociological studies center around folk and popular female musicians, but two important articles which can be applied to the role of women in classical music are "Whence Comes the Lady Tympanist?" Gender and Instrumental Musicians in America, 1853-1990"[2] by Beth Abelson Macleod and "Reshaping a Discipline: Musicology and Feminism in the 1990s"[3] by Susan McClary. These two articles examine the role of the female composer and performer as dictated by social and cultural attitudes both in terms of women as musicians and the inclusion of women in historical studies.

In her article, Macleod discusses the role of women musicians in America. Macleod asserts that women's participation and success as instrumentalists depended on the instrument they played. She concludes that the social ideas regarding which instruments were appropriate for women musicians to play between 1800 and 1900 both

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[2]Beth Abelson Macleod, "Whence Comes the Lady Tympanist?" Gender and Instrumental Musicians in America, 1853-1990," *Journal of Social History*, 27:2, Winter 1993, pp. 291-308.

[3]Susan McClary, "Reshaping a Discipline: Musicology and Feminism in the 1990s," *Feminist Studies*, 19:2, Summer 1993, pp. 399-423.

defined and limited their options as musicians. Macleod asserts that these barriers are still in place today.

McClary's article contends that research on women in music history began in the 1970s and has continued at an accelerated pace since that time. Early research described individual composers and performers and some specific historical contexts. Later contributions, especially those written after 1980, revolved around social conditions within which female composers wrote and sought to create more continuous historical contexts in terms of women's contributions to music. McClary asserts that throughout history individual artists did not operate independently of the social context.

Both articles conclude that women have been limited in their roles as musicians and have been excluded from historical documentation because of social, political, and cultural conditions. Regardless of whether these two studies prove true after further studies are made into the role of women in music history, they are important for bringing female musicians to the forefront of academic research in the areas of musicology and sociology. The recent recognition of the contributions of women musicians by scholars follows the striving of women, in general, to be treated as equals in American society.

Joan La Barbara came of age in a time when women were actively coalescing to be recognized and treated as politically, socially, economically, and intellectually equal to men. During the 1960s, when La Barbara was in her teenage-through-college years, the women's movement began to make great strides in legally assuring women the right to make choices regarding family planning, healthcare, education, and employment. During this time the birth control pill was mass marketed, although only married women were allowed confidentiality between patient and doctor regarding the use of it. In 1964 women

were included in Title VII legislation which eventually prohibited gender discrimination in the area of employment and protected women against sexual harassment in the workplace. Affirmative Action added women to its ranks in the late 1960s. It was during this time that women began to organize, in the greatest numbers since World War II, in order to challenge the status quo.

In the first part of the 1970s, when La Barbara began her professional career, Congressional legislation provided protection against gender inequality. In 1972 the United States Supreme Court guaranteed all women the right to confidentiality in regard to family planning. In this same year Title IX legislation provided women with legal protection against inequality in education in government-funded schools. In 1974 the Women's Educational and Equity Act, introduced by Walter Mondale, was passed by Congress. During this time women were publicly questioning healthcare for themselves, and in 1976 the National Women's Health Network was founded. In 1978 Nancy Casselbaum became the first woman elected to the United States Senate. Women all over the United States became more active in the areas of politics, healthcare, employment, and education.

The political victories women gained in gender-equality issues during the 1960s and 1970s forever changed the way American women would view themselves. While legislation enacted during this time provided political recognition of women's equality to men, women continue to struggle to enforce the laws written to protect them. Nevertheless, because of the political gains American women have made since the 1960s, women feel freer to strive to fulfill their potential than in any other time in American history. Joan La Barbara was able to use the gains in equality to pursue her own career

choices in a way that probably would not have been possible had she been born in an earlier time. Earlier explorations into extended vocal techniques were done mainly by men. Schoenberg, Berg, and Berio were all male, although Cathy Berberian and Jan De Gaetani, neither of whom are composers of extended vocal techniques, gained some recognition as performers of extended vocal works created by men. As in the other fields of employment, music composition was dominated by men. Because of the gains made in gender equality during her lifetime, La Barbara was free to aspire to become a composer and performer following her own agenda.

Other societal changes allowed La Barbara to pursue her unique search for new vocal timbres. The Civil Rights Movement of the 1960s and people's aggressive attitudes toward utilizing protest and demonstration against the Vietnam War opened new doors of expression for many Americans. A new sense of freedom to explore culturally taboo subjects became infused in American society. In an oral interview with Libby Van Cleve regarding the freedom felt by the young adult generation of the early 1970s to find nontraditional avenues to pursue their dreams, La Barbara states, "There was that kind of excitement in the air, that kind of support for sort of breaking out on your own and doing your own thing. And so that was what I did . . . There was a sense of freedom and there was the sense that if you really wanted to do something, you could."[4] Later in the interview La Barbara says, "But it was a very strong time, and you did feel that you didn't have to do what your parents did. You didn't have to go along the straight-and-narrow. You could take a new direction. And I think that certainly had a lot to do with the sense

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[4]Joan La Barbara with Libby Van Cleve, New York City, February 17, 1998 (*Yale Oral History, American Music Series*, Interview n. 275 a-f), pp. 16-17.

of freedom, and independence, and defiance that we were experiencing."[5] This change, along with the above-mentioned gains in equality, allowed La Barbara to have the freedom not only to pursue her need for self-sufficiency, but her interest in nontraditional forms of singing. But, in her pursuit of her goal, Joan La Barbara faced her own personal struggles regarding equality issues.

As mentioned in the third chapter, La Barbara felt a sense of gender inequality during her time of employment with Steve Reich. When La Barbara began working for Philip Glass in 1973, Reich refused to allow La Barbara to work with both him and Glass. His justification for his refusal was his concern that La Barbara's gender made her more visible to music critics who were unable to distinguish between Reich's and Glass' compositional styles. It should be noted that Reich placed La Barbara and the other singer in his group center stage when his group performed live. The reasons for this may vary, but it is plausible that Reich used La Barbara's gender to draw attention to his work. When La Barbara pointed out that other people in Reich's group were also working for Glass, according to La Barbara, Reich's response was, "Yes, but they're men."[6] La Barbara chose to complete her work with Reich through the recording of "Drumming" and "Music for Mallet Instruments, Voices, and Organ," but she left his employment shortly thereafter to work with Glass. La Barbara acknowledges that there was gender bias in America in the early 1970s.

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[5]Ibid, p. 22.

[6]Ibid, p. 28.

The negative impact of this gender bias prevented her from continuing her work with Reich, even though she was interested in contributing to his music. She believes the positive impact was that she received attention for being a composer and performer simply because she was a woman. She states, "I think that I got some attention for being a [woman who was a] composer-performer. First of all, there was not another [female] singer doing solo voice at that point in time. Meredith Monk, certainly, was doing her work, but she was doing theater work. She wasn't doing solo voice pieces."[7] It should be noted that there were men who were working with extended vocal techniques. Ed Harkins and Philip Larson, and later David Moss, performed extended vocal techniques during this time, and Moss currently resides in Berlin, Germany and is trying to establish a new vocal institution in Brussels, Belgium where singers can go to learn extended vocal techniques, jazz improvisation, and other vocal techniques. Yet, none of these male performers use extended vocal techniques in the way La Barbara does. They are not as recognized as La Barbara is for their work in extended vocal techniques nor have they had as strong an influence as La Barbara has on other composers to incorporate extended vocal techniques into their works.

La Barbara recalls conversations with the flutist Carol Webber in which she and Webber discussed the fact that they were breaking ground for the generation of women musicians to follow. Both La Barbara and Webber believed they had to be tough to get to where they wanted to be. La Barbara felt she had to be aggressive in her demands to be heard. She states, "We had to fight to be taken seriously."[8] Interestingly, she never had to

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[7]Ibid, p. 28.

[8]Joan La Barbara with Linda Ann Brown, Santa Fe, New Mexico, August 9, 2000.

fight for equal pay as a woman. There were times when she felt she was not paid enough as a musician, especially when she was working for Reich, but the inequality never reflected her gender. She was paid the same as the men in the group.

For the most part, Joan La Barbara chose to work with and associate herself with men and women who were open-minded in regard to the equality of women and who were willing to encourage her to fulfill her own potential. Reich allowed her to have a small amount of input in his compositional process, but as a composer he maintained complete control over the compositional choices. He dictated to La Barbara which sounds he wanted her to produce. Glass allowed La Barbara to choose the timbre or timbres she thought would best enhance the score. In turn, La Barbara taught Glass what the voice can physically do within a narrow band. His minimalistic style of composition requires extended repetitions of melodic passages, and La Barbara was able to dictate some changes in the number of repetitions Glass used based on when her voice would become fatigued by being restricted to a particular pattern. Glass was supportive of the musicians in his group who wanted to do solo concerts on their nights off, and this support allowed La Barbara to pursue her own career. This was an important time of growth for La Barbara as a composer.

La Barbara met John Cage around 1972 and her relationship with Cage grew into a mentorship. His open-mindedness not only toward music itself, but toward life, in general, would have a great impact on La Barbara. He taught her the importance of how one behaves and meets the task of day-to-day existence.[9] He encouraged her to explore

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[9]Joan La Barbara with Libby Van Cleve, New York City, February 17, 1998 (*Yale Oral History, American Music Series*, Interview n. 275 a-f), p. 56.

her own interests regardless of current musical trends. He attended one of her concerts, at her request, and later wrote works for her including a collection of songs entitled *Singing Through* that focus on La Barbara's pure tones and compositionally fall well outside his best known writing style. She, in essence, influenced his writing style, if only briefly.

In 1979 she married Morton Subotnick. The influence they have on each other is tremendous. Subotnick has written several compositions which call for extended vocal techniques, an area of composition he did not explore until he met La Barbara. La Barbara has utilized Subotnick's expertise in the area of electronic composition to expand her own knowledge of electronic music composition. They are supportive of each other's work and respectful of each other's musical identity.

La Barbara was not interested in using her music to promote the feminist movement of the early 1970s. Her music was not composed as a means of making a political or social statement, rather her compositions were about music and thought. She was and is supportive of Affirmative Action, and she has done concerts for the American Women Composers society. She has worked collaboratively with Judy Chicago and Lita Albuquerque, and she composed the film score for *Anima* which tells the story of a woman's journey into the desert. This latter work was later rewritten as a concert suite for voice and chamber ensemble, and the recording was made by musicians who were all women. La Barbara is quick to point out that while she sometimes chooses to work with women artists and musicians, her goal is not to compose women's music.[10]

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[10]Joan La Barbara with Linda Ann Brown, Santa Fe, New Mexico, August 9, 2000.

Other influences on Joan La Barbara's work lay in the history of music itself. With the advent of computer and electroacoustic music in the twentieth century came the search for timbres which were not part of the traditional sonic fabric. Composers of serious music sought to create electrically-produced and/or manipulated sound. The most notable early electroacoustic music female composer is Pauline Oliveros. As early as 1961 she was accepted as an equal among the Californian composers of electroacoustic music. After the creation of the first computer-generated sounds by Max Matthews in 1957 at Bell Labs, the search for computer programs which could be used to create music led to an openness toward sharing information that included female composers and computer programmers. Women were, and continue to be, openly accepted and acknowledged for their contributions to this area of music. Laurie Spiegel worked in the GROOVE analog room at Bell Labs in the early 1970s. Sylviane Sapir, interested in realtime software, became manager of the software development team for Musical Audio Research Station (MARS) in the early 1980s. Carla Scaletti is one of the creators of the Kyma system which grew out of her work in the 1980s. Laurie Anderson and Kaija Saariaho are widely recognized as composers of electroacoustic/computer music by other musicians in that field. It is in the area of electroacoustic and computer music that, for one of the first times in music history, many women are given the recognition they deserve as history is being made and recorded by historians. Joan La Barbara and her extended vocal techniques is included in this group. Her search for sounds which fall outside traditional music timbres is repected and acknowledged by musicians in the area of electroacoustic and computer music. It is in the more traditional areas of music history that women have yet to gain an equal status with men.

Joan La Barbara was able to pursue her dreams of becoming a professional composer and performer, in part, because she came of age in a time when a woman's right to political, social, economical, and intellectual equality was legally recognized by the Congress of the United States, and a group of musicians who worked in the area of electroacoustic and computer music openly accepted and acknowledged the contributions of women to this field. Although women composers were not generally recognized by music historians until a decade after she began her professional career, the changes that took place in American society and the musical culture were enough to allow her to pursue her own path as a musician. She surrounded herself with people who were open-minded and encouraged her to fulfill her potential. She created relationships with both men and women which, to this day, are filled with mutual respect. They respect each other as intellectuals, composers, and performers. There is a sharing of knowledge that encourages growth both as a human being and as a musician. Although cultural gender bias continues to plague American women, La Barbara is one of the dynamic forces who looks beyond the present state of American women and sees herself as a composer and performer who is an equal among her contemporaries. Perhaps this philosophy has been a contributing factor to her success.

CHAPTER 6
CONCLUSION AND APPLICATIONS FOR TEACHING MUSIC

Joan La Barbara's lifelong dedication to the exploration of the human voice as a multi-faceted instrument has placed her firmly in the history of contemporary art music. Her work as a pioneer of extended vocal techniques encompasses all areas of music. She is a composer, performer, and advocate for extended vocal techniques, and her success in all three of these areas has brought recognition in the world of music to her work and to extended vocal techniques.

The influences that shaped her career came from a variety of sources including progressive teachers, such as Helen Boatwright, Phyllis Curtin, and Marion Szekely-Freschl. Supportive musicians like John Cage, Philip Glass, and Morton Subotnick not only encouraged La Barbara in her endeavors, but they were influenced by them. A changing society that advocated women's right to pursue avenues of employment not previously open to them and a changing society that encouraged Americans to expand their creative philosophies allowed La Barbara to freely experiment with new vocal sounds. She has spent a lifetime perfecting and formalizing her discoveries.

Building on a foundation laid down by earlier composers, namely Arnold Schoenberg and Luciano Berio, La Barbara spent the early part of her career, circa 1970 to 1980, exploring extended vocal techniques. Through experimentation and improvisation

La Barbara discovered and perfected many of these techniques, some of which have become her "signature" sounds. These "signature" sounds include ululations, multiphonics, resonance focusing, overtone focusing, circular singing, rhythmic breathing, glottal clicks, vocal fry, tongue clicks and snaps, and pure tones. During this time La Barbara composed etudes to teach students the art of vocal extension. She also wrote compositions for vocalists interested in using extended vocal techniques. La Barbara was instrumental in introducing extended vocal techniques into the sonic vocabulary of contemporary composers.

The latter part of her career, circa 1981 to the present, has been spent incorporating these techniques into her own compositions. An examination of three of her purely vocal works composed during this time reveals an overall compositional design based on the layering of extended vocal techniques within a given work. Her use of this layering technique varies from work to work. In "Erin" La Barbara creates flowing blocks of sounds that fluctuate in thickness. In this work horizontal blocks of sound based on pitch register are layered upon vertical blocks of sound based on thickness of sonic fabric. Homogeneous sections within "Erin" are linked together through abrupt and subtle transitional sections.

In "Time(d) Trials and Unscheduled Events" La Barbara layers unrelated musical events on top of each other. The work may be described as a polytextural composition in which polyrhythms are placed against smooth-flowing extended vocal techniques to create a heightened sense of contrast between two musical events occurring simultaneously in the work. In this composition La Barbara requires the listener to focus on two or more musical events simultaneously while discerning the overall intention of the piece.

Extended vocal techniques are layered upon each other to create vertical blocks of sounds in "to hear the wind roar." Smooth transitions between blocks of sounds are used throughout the work. The blocks of sounds created in this work are based on rhythmic breathing, and fluctuating dynamic levels create a sense of varying thickness in the texture of the composition.

"Erin," "Time(d) Trials and Unscheduled Events," and "to hear the wind roar" are exemplary compositions built on extended vocal techniques. These works, along with other compositions by Joan La Barbara, have brought extended vocal techniques to the forefront of contemporary art music. Recognized by many of her peers as a pioneer in exploration of sound, La Barbara has secured for herself a place in the history of western art music.

There are strong implications for the application of La Barbara's work to vocal performance studies, music education, music theory and composition, and music history. All music students should be made aware of Joan La Barbara's contributions to the development of extended vocal techniques. As extended vocal techniques continue to be included in the sonic fabric of contemporary serious music, students need to understand and recognize one of the sources of these techniques and how these techniques have been incorporated into the body of music literature.

Through her work as a composer and performer, La Barbara has made extended vocal techniques accessible to students and faculty in the area of vocal performance. Her early works "Circular Song" and "Voice Piece: One-Note Internal Resonance Investigation" were written as studies in circular singing, multiphonics, overtone focusing, and resonance focusing. La Barbara wrote these compositions with the hope that they

would be used as extended vocal technique exercises by voice students.[1] Using the recordings made by La Barbara, voice faculty and voice students can hear the sounds they are expected to produce when performing these etudes. Vocal performers can also study her other compositions, such as "Time(d) Trials and Unscheduled Events" and "to hear the wind roar," to learn extended techniques like rhythmic breathing, ululations, microtonal singing, the use of pure tones, harmonic focusing, glottal clicks, tongue snaps, and unusual or accentuated articulations of sound. Scores for many of her works are available by contacting the music library of the University of New Mexico, which is developing an archive of La Barbara's recordings and scores. The *Lexicon of Extended Vocal Techniques* and its companion *Index* are another excellent source for faculty and students who study extended vocal techniques.

Voice faculty should include extended vocal techniques in the required repertoire of the voice students. The number of composers and performers using extended vocal techniques is growing, and voice students should be keep abreast of the ever-changing voice literature. La Barbara gives extended vocal technique workshops, and students and faculty from all disciplines of music, especially those in the area of voice performance, would benefit greatly from attending and participating in these workshops.

Music educators may want to incorporate studies of extended vocal techniques into their field because a study of listener responses to rock, traditional jazz, and art music, from a wide range of age groups, puts forth the following hypothesis, credited to a study

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[1]Joan La Barbara with Linda Ann Brown, Santa Fe, New Mexico, August 9, 2002.

found in the *Journal of Research in Music Education* and based on D.J. Hargreave's concept of open-earedness, that is, the positive reception of different musical styles: Younger children are more open-eared than any other age group. Open-earedness declines as the child enters adolescence. There is a partial rebound of open-earedness as the listener matures from adolescence to young adulthood. Open-earedness declines as the listener matures to old age.[2] Although rock music is the most consistently preferred musical style among all age groups, preference studies show that young adults between seventeen and twenty years of age who attend college are the most receptive to learning about western art music. Art music also supersedes rock preferences for fifth graders and ninth-through-eleventh graders.[3] Students at institutions of higher education who major in music education should be introduced to the area of extended vocal techniques since this is the age group most open to western art music.

Faculty members who teach music education should introduce extended vocal techniques into courses which teach elementary and secondary music education. Music educators who work in elementary and secondary education should be familiar with extended vocal techniques so they can introduce these techniques to their students in fifth grade and ninth-through-eleventh grades. Many of the sounds Joan La Barbara discovered and perfected already exist in world music. As students become more exposed to world cultures and the music that exists in these cultures they should be aware of how sounds from world music, for example ululations and multiphonics, have been incorporated into

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[2]A. LeBlanc, W. L. Sims, C. Siivola, & M. Obert, "Music Style Preferences of Different Age Listeners," *Journal of Research in Music Education*, 44:1, 1996, pp. 49-59.

[3]Ibid.

western art music. Courses in choral conducting should include a section on extended vocal techniques which introduces these techniques to students unfamiliar with them. These courses should include discussions on viable approaches to conducting works containing extended techniques.

La Barbara's scores should be thoroughly examined by students of music theory. Further studies need to be made into her notational devices to thoroughly document whether or not standardized notation for extended techniques exists among composers who use extended vocal techniques, and to determine La Barbara's influence in the notational process. Only La Barbara's extended vocal works have been examined in this study. A review of Appendix A will reveal that La Barbara wrote many compositions for a variety of instrumentations. These works should be examined to determine if the compositional style of her mature vocal works is common to all of her compositions. Her work in the area of electronic music needs further study to determine the strength of her influence in this field, particularly as it relates to interactive compositions. Composers should be made aware that her extended vocal techniques may be a potential new source of sounds which can be used in their compositions.

From an historical standpoint, this study is the only one to date which discusses, in depth, La Barbara's contributions to western classical music. For the first time, her extended vocal techniques are defined. Several of her works are analyzed and conclusions about her compositional style are presented. This study draws material from a wide variety of sources. Most of these sources are held in private collections including oral interviews, written interviews, recordings, scores, videos, and lexicons. These sources need to be made public so that further studies can be done on the work of Joan La

Barbara. Joan La Barbara's work can also serve as a starting point for more research into the area of extended vocal techniques. Other composers utilizing these techniques are mentioned, including Deborah Kavasch, John Anthony Celona, David Evan Jones, Edwin London, Roger Reynolds, Joji Yuasa, John Cage, Morton Subotnick, Charles Dodge, and David Moss. Research needs to be conducted into these composers' use of extended vocal techniques and Joan La Barbara's influence on their work.

La Barbara broadened the sonic palette of western art music through her experimentations, and she expanded previously-set boundaries by perfecting a variety of extended vocal techniques including multiphonics, overtone focusing, resonance focusing, vocal fry, glottal clicks, tongue clicks and snaps, ululations, rhythmic breathing, pure tones, and circular singing. Her work is formalized in her compositions and the compositions of other composers who were, and continue to be, influenced by her. Because of La Barbara's contributions to this area of music, composers and performers now have available to them a larger sonic vocabulary from which they can draw inspiration for their work. Music scholars now have available to them a source that is ready for further research. Joan La Barbara has carved a permanent place for herself in music history.

APPENDIX A
COMPOSITIONS BY JOAN LA BARBARA: 1974-1997

"Voice Piece: One-Note Internal Resonance Investigation" (1974) for amplified voice alone
premiere: December 9, 1974, St. Mark's Church, New York City, New York

"Hear What I Feel" (1974)
premiere: January 15, 1975, Washington Square Church, New York City, New York

Ides of March (1974) for string quartet, 3 voices (soprano, alto, baritone,) percussion, and contrabassoon, arranged in three trios
premiere: February 15, 1976, The Kitchen, New York City, New York

"Vocal Extensions" (1975) for voice with electronics
premiere: January 15, 1975, Washington Square Church, New York City, New York

An Exploration in Sound and Movement (1975) for two performers
premiere: December 19, 1975, Environ, New York City, New York

"Circular Song" (1975) for amplified voice alone
premiere: December 19, 1975, Environ, New York City, New York

Performance Piece (1974, revised 1979) for solo voice
premiere: March 17, 1979, 1750 Arch Street, Berkeley, California

WARP-32375-1 (1975) for voice and percussion
premiere: May 25, 1977, Maison de la Culture, Rennes, France

Vermont II (1975) video performance piece for vocalist in an outdoor environment
premiere: October 18, 1975, Mills College, Oakland, California

Hunters (1975) video performance piece for vocalist in an outdoor environment
premiere: October 18, 1975, Mills College, Oakland, California

"Thunder" (1975) for six timpani and voice with electronics
commissioned by CAPS Music Fellowship
premiere: February 15, 1975, The Kitchen, New York City, New York

Space Testing (1976) for acoustic voice in a sonic environment
premiere: 1976, Theatre Vanguard, Los Angeles, California

Ides of March, No. 2 (1976) for soprano saxophone, voice, and percussion
premiere: April 22, 1976, Composers' Forum, WBAI Free Music Store, New York City, New York

An Exaltation of Larks (1976) for voice with electronics, MOOG drum, and synthesizer
premiere: April 22, 1976, Composers' Forum, WBAI Free Music Store, New York City, New York

Chords (1976) for amplified voice alone
premiere: April 22, 1976, Composers' Forum, WBAI Free Music Store, New York City, New York

Des Accords pour Teeny (1976) for voice alone
premiere: Radio France live broadcast, November 4, 1976

Les Oiseaux qui chantent dans ma tete (1976) for voice alone
premiere: Radio France live broadcast, November 4, 1976

Ides of March, No. 4 (1976) for tenor saxophone, trombone, voice, and percussion
premiere: December 17, 1976, The New School, New York City, New York

Chords and Gongs (1976) for voice, Chinese cymbal, finger cymbals, and gongs
premiere: December 17, 1976, The New School, New York City, New York

Ides of March, No. 5 (1977) for English horn, voice, and percussion
premiere: April 6, 1977, Carnegie Recital Hall, New York City, New York

Ides of March, No. 5a (1977) for English horn, voice, bowed vibraphone, and percussion
premiere: April 6, 1977, Carnegie Recital Hall, New York City, New York

CYCLONE (1977) a sound environment consisting of pre-recorded synthesized winds, phase shifters, amplified and electronic percussion, electric guitar, voices, suspended cymbal, and a light-panning device
premiere: May 14, 1977, ISCM League of Composers Welmusiktage '77, Bonn, Germany
International Jury Award for sound environment

Ides of March, 4a (1976-1977) for amplified voice with tenor saxophone, trombone, voice, and percussion on tape
premiere: August 10, 1977, Ste. Maximim, Provence, France

"Cathing" (1977) for voice and tape
premiere: February 17, 1978, The Kitchen Center for Video and Music, New York City, New York

Loisaida (1977) for voice, kalimba, steel drum, and hi-hat cymbal
premiere: February 17, 1978, The Kitchen Center for Video and Music, New York City, New York

Ides of March, No. 7 (1977) for voice, French horn, trombone, and percussion
premiere: June 19, 1977, Sonesta Koepelzaal, Holland Festival, Amsterdam

Layers (As Is) (1977) for voice, electronics, acoustic and electric percussion
premiere: October 25, 1977, Entermedia Theatre, Dance Umbrella Series, New York City, New York

"Twelvesong" ("Zwolfgesang") (1977) for multi-track tape
commissioned by Radio Bremen
broadcast premiere: November, 1977, radiowork on RadioBremen, Germany
concert premiere: May 6, 1978, live voice and tape, Pro Musica Nova Festival, Bremen, Germany

CYCLONE CON(S)T(R)AINED (1978) a sound installation
premiere: January 15, 1978, Project Studios One, Institute for Art and Urban Resources, New York

Ides of March, No. 3 (1978) for trombone, tuba, voice, and percussion
premiere: March 11, 1978, Theatre Vanguard, Los Angeles, California

Ides of March, No. 3a (1978) for trombone, tuba, two voices, and percussion
premiere: March 16, 1978, California Institute of the Arts, Valencia, California

Chandra (1978) for solo voice, male chorus, and chamber orchestra
commissioned by Pro Musica Nova Festival, Radio Bremen
premiere: May 7, 1978, Pro Musica Nova Festival, Bremen, Germany

"Autumn Signal" (1978) for voice and Buchla synthesizer
premiere: October 22, 1978, Metamusik Festival, Berlin, Germany

"quatre petites betes" (1978-1979) a quadraphonic soundance
commissioned by Annette Baack
concert premiere: a performance work for voice and tape, May 9, 1979, Baack'scher Kunstraum, Koln, Germany
gallery premiere: installation work at daadgalerie, May 1979, Berlin, Germany

Twelve for Five in Eight (1979) for five voices
premiere: April 29, 1979, California Institute of the Arts Contemporary Music Festival, Valencia, California

Responsive Resonance with Feathers (1979) for piano and tape
commissioned by Joan Tower
premiere: May 21, 1979, Christ and St. Stephen's Church, New York City, New York

The Executioner's Bracelet (1979) for multi-track tape, a gallery installation piece
commissioned by Galerie Yvon Lambert
premiere: September 1979, Galerie Yvon Lambert, Paris, France

California Chant "Raicha Tria" (1979) for amplified voice or unamplified voice
premiere: October 27, 1979, K-19 Performance Space, Berlin Text-Sound Festival, Berlin, Germany

"Klee Alee" (1979) for voice and multi-track tape
commissioned by RIAS-Berlin
premiere: October 5, 1979, La Chapelle de Sorbonne, Festival d'Automne a Paris, Paris, France

"ShadowSong" (1979) for voice and multi-track tape
commissioned by RIAS-Berlin
premiere: October 5, 1979, La Chapelle de Sorbonne, Festival d'Automne a Paris, Paris, France

"Erin" (1980) for voice and multi-track tape
commissioned by VPRO Radio, Hilversum, Holland
broadcast premiere: radiowork on VPRO, 1980
concert premiere: live voice and tape, June 21, 1980, Theatre Gerard Philipe, Paris, France

October Music: Star Showers and Extraterrestrials (1980) for voice and multi-track tape
commissioned by National Endowment for the Arts, Visual Arts Fellowship
premiere: October 1980, The American Center for Students and Artists, Paris, France

"as lightning comes, in flashes" (1981) mixed media performance environment with 7 singers, 5 dances, stereo tape, 8-channel tape, electronics, video, and costumes
premiere: February 28, 1981, California Institute of the Arts Contemporary Music Festival '81, Valencia, California

"Silent Scroll" (1982) for voice, cello (or double bass,) flute, zoomoozophone, cup gongs
commissioned by Newband
premiere: April 25, 1982, Symphony Space, New York City, New York

Winds of the Canyon (1982) for voice and tape
concert premiere: November 12, 1982, San Francisco Symphony New and Unusual Music Series, Japan Arts Center, San Francisco, California
rescored and restaged as a theater work in collaboration with visual artist Lita Albuquerque
stage premiere: March 3, 1986, Los Angeles Theatre Center, Los Angeles, California

"Vlissingen Harbor (1982) for voice and chamber ensemble
premiere: December 6, 1982, Monday Evening Concerts, Bing Auditorium, Los Angeles County Museum, Los Angeles, California

"The Solar Wind" (1982) for voice and chamber ensemble
commissioned by National Endowment for the Arts Composer Fellowship
premiere: February 7, 1983, Mark Taper Forum, Los Angeles Music Center, Los Angeles, California

The Solar Wind II (1983) for mixed chorus and instruments (flute/piccolo, keyboard synthesizer, and 2 percussion)
commissioned by Ars Nova Vocal Ensemble
premiere: November 14, 1983, Danmarks Radio, Copenhagen, Denmark

"Berliner Traume" (1983) for multi-track tape
commissioned by Airworks radio series
broadcast premiere: January 1984, WNYC-FM
rescored for voice and tape
concert premiere: February 18, 1984, Walker Art Center, Minneapolis, Minnesota

The Solar Wind III (1984) for amplified voice and orchestra
premiere: May 12, 1984, The Scottish Rite Hall, San Francisco, California

"Time(d) Trials and Unscheduled Events" (1984) for multiple voices
commissioned by The Independent Composers Association for "Sounds in Motion" radio series broadcast for Los Angeles Olympics Arts Festival
broadcast premiere: 1984, KUSC-FM for Los Angeles Olympics Arts Festival, Los Angeles, California
rescored for 8 voices
concert premiere: July 4, 1987, Los Angeles, California

After "Obervogelsang" (1984) for amplified voice and tape
premiere: June 5, 1984, New York Philharmonic Horizons Festival, Avery Fisher Hall, New York City, New York

"Loose Tongues" (1985) for multiple voices
commissioned for National Public Radio's "House with a View"
broadcast premiere: radiowork
rescored for voice with tape
concert premiere: September 1986, The Performance Gallery, San Francisco, California

A Rothko Study (1985) for voice and chamber ensemble
premiere: November 3, 1985, New Music America Festival, Bing Auditorium, Los Angeles County Museum, Los Angeles, California

Voice Windows (1986) for voice and interactive video system
in collaboration with Steina and Woody Vasulka
premiere: March 3, 1986, Los Angeles Theatre Center, Los Angeles, California

ROTHKO (1986) for voice, 16 voices on tape, and 2 bowed pianos
premiere: April 5, 1986, New Music America Festival, The Rothko Chapel, Houston, Texas

Helga's Lied (1986) for voice and chamber ensemble
commissioned by Esbjerg Ensemble
premiere: October 10, 1988, Aarhus Concert Hall, Aarhus, Denmark
rescored for voice, cello, and electronics
premiere: December 13, 1987, Kunsthaus Zurich, Switzerland

Prologue to The Book of Knowing ... (and) Overthrowing (1987-89) for solo voice with projections, costumes, and movement
in collaboration with Judy Chicago
production partially funded by the New Mexico Arts Division and the National Endowment for the Arts
premiere: July 6, 1988, First New York International Festival of the Arts, Merkin Hall, New York City, New York

Conversations (1988) for unaccompanied solo voice
premiere: August 3, 1988, Otto Botanico, Rome, Italy

"Urban Tropics" (1988) a sound painting for voice, percussion, and indigenous Miami sounds
commissioned by New Music America-Miami Festival
broadcast premiere: December 12, 1988, Miami, Florida
concert premiere: March 30, 1989, Ventura City Hall concert series

"l'albero dalle foglie azzurre" (1989) for solo oboe and tape
commissioned by the Saint Louis Symphony Orchestra for Barbara Herr Orland, oboe
premiere: March 20, 1989, Saint Louis Symphony Discovery Series, Sheldon Performing Arts Centre, Saint Louis, Missouri

Events in the Elsewhere (1990) and opera inspired by the life and work of Steven Hawking
funded by the National Endowment for the Arts, Opera/Music Theater, New American Works program
premiere: August 24, 1990, Center for Contemporary Arts, Santa Fe, New Mexico

In the Dreamtime (1990) a self-portrait sound collage of 17 works spanning 14 years
commissioned by WestDeutscher Rundfund-Koln
premiere: May 7, 1991, WestDeutscher Rundfund-Koln, Germany

Klangbild Koln (1991) a sound painting for voice, percussion, and indigenous Koln sounds
Akustische International Competition Selection 1990-1991
premiere: May 7, 1991, WestDeutscher Rundfund-Koln, Germany

Anima (1991) filmscore for voice, percussion, electronic keyboard synthesizers, and computer
premiere: September 25, 1992, New York Independent Filmmakers Festival

"Awakenings" (1991) for chamber ensemble
commissioned by the University of Iowa to celebrate the 25th Anniversary of the Center for New Music
premiere: September 21, 1991, University of Iowa

"to hear the wind roar" (1991) a work for multiple voices and hand-held percussion, in three versions
8-voice chamber vocal ensemble and percussion
commissioned by I Cantori
premiere: May 9, 1992, Occidental College, Pasadena, California
full chorus with hand-held instruments
premiere: July 18, 1992, Adirondack American Music Festival
solo voice and percussion with tape
premiere: August 8, 1992, Center for Contemporary Arts, Santa Fe, New Mexico

Face to Face (1992) for voices, electronics, and percussion
premiere: February 1, 1992, SonicWorks Festival, DiverseWorks, Houston, Texas

Awakenings II (1992) for voice and chamber ensemble
premiere: January 28, 1992, Arizona State University Concert Hall, Tempe, Arizona

ShamanSong (1992) suite for voice, percussion, and tape
premiere: March 2, 1992, Athens Concert Hall, Athens, Greece

"73 Poems" (1993) for multiple voices with electronic modification
in collaboration with text artist Kenneth Goldsmith
commissioned by Permanent Press for publication as a book with CD
premiere: December 4, 1993, Wolfson Gallery, Miami, Florida

The Misfortune of the Immortals (1994-1995) interdisciplinary interactive media opera for voices, dancers, actors, video projections, MIDI instruments, and interactive computer systems
in collaboration with Mark Coniglio and Morton Subotnick
commissioned by Walker Art Center, Spoleto Festival, and California Institute of the Arts
grant funded by Meet the Composer/Reader's Digest Commissioning Program in partnership with the National Endowment for the Arts and Lila-Wallace-Reader's Digest Fund
premiere: 1994, Walker Arts Center, Minneapolis, Minnesota and Arizona State University, Tempe, Arizona

"in the shadow and act of the haunting place" (1995) for voice and chamber ensemble (horn, tuba, piano, percussion, violin, and cello)
premiere: January 17, 1995, Veterans' Building Green Room, San Francisco, California

Calligraphy II/Shadows (1995) for voice and Chinese instruments (dizi, ehru, yangqi, and percussion)
commissioned by Nai-Ni Chen Dance Company
premiere: June 8, 1995, St. Mark's Danspace, New York City, New York

de profundis: out of the depths, a sign//a different train (1996) for 4 voices, percussion, bowed piano, and tape
based on text by Melody Sumner Carnahan
premiere: December 7, 1997, The College of Santa Fe, Santa Fe, New Mexico

"A Different Train" (1996) for 4 voices, bowed piano, and tape
based on text by Melody Sumner Carnahan

de profundis: out of the depths, a sign (1996) for 4 voices, percussion, and tape
based on text by Melody Sumner Carnahan

"a trail of indeterminate light" (1997) for solo cello w/ voice (cellist who sings)
commissioned by Music Teachers National Association and New Mexico Music Teachers Association
premiere: November 14, 1997, Music Teacher Association Conference, St. John's Church, Santa Fe, New Mexico

APPENDIX B
DISCOGRAPHY OF WORKS BY JOAN LA BARBARA

Voice is the Original Instrument, Wizard Records RVW 2266, LP only, 1976.
"Circular Song"
"Vocal Extensions"
"Voice Piece: One-Note Internal Resonance Investigation"

Tapesongs, Chiarascuro CR-196, LP only, 1978.
"Cathing"
"Thunder"

Reluctant Gypsy, Wizard Records RVW 2279, LP only, 1979.
"Autumn Signal"
"Klee Alee"
"quatre petites betes"
"ShadowSong"

As Lightning Comes, in Flashes, Wizard Records RVW 2283, LP only, 1983.
"as lightning comes, in flashes"
"Erin"
"Twelvesong"

The Art of Joan La Barbara, Elektra/Nonesuch 78029-1, LP only, 1985.
"October Music: Star Showers and Extraterrestrials"
"The Solar Wind"
"Vlissingen Harbor"

Newband: Microtonal Works by Partch, Cage, La Barbara, and Drummond, Newband Mode 18, 1990.
"Silent Scroll"

Sound Paintings/Joan La Barbara, Lovely Music LCD 3001, 1991.
"Urban Tropics"
"ShadowSong"
"Time(d) Trials and Unscheduled Events"
"Erin"
"Klee Alee"
"Berliner Traume"

The Virtuoso in the Computer Age III, CDCM Computer Music Series, Vol. 13, Centaur CRC-2166, 1993. Includes works by other composers.
"l'albero dalle foglie azzurre (tree of blue leaves)"

73 Poems, book with CD, published by Permanent Press, 1994. CD alone: Lovely Music LCD-3002, 1994. (Kenneth Goldsmith, text)

"Awakenings" included on Music & Arts CD-830, 1994.

The Time is Now, Frog Peak Music FP006, 1998. Includes works by other composers.
"de profundis: out of the depths, a sign" (Melody Sumner Carnahan, text)
"A Different Train" (Melody Sumner Carnahan, text)

ShamanSong/Joan La Barbara, New World Records 80545-2, 1998.
"ShamanSong"
"ROTHKO"
"Calligraphy II/Shadows"

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Linda Ann Brown received her Bachelor of Arts degree in music history and literature from the University of Florida in 1984, her Master of Fine Arts degree in musicology from the University of Florida in 1988, and her Doctor of Philosophy in music education in higher education/music history and literature from the University of Florida in 2002. She held the University of Florida College of Fine Arts Excellence in Graduate Studies Fellowship from 1997 to 2000. Ms. Brown is a member of the College Music Society, the Society for Electroacoustic Music in the United States, and the American Musicological Society. She premiered her composition *Perceptual Evolution* at the 1999 *Florida Electroacoustic Music Festival.* Her works *Titania's Lullaby* and *Bottom's Song*, premiered in April of 2000, were commissioned by Florida Atlantic University for their production of William Shakespeare's *A Midsummer Night's Dream*. Ms Brown is currently employed by Central Florida Community College.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

David Z. Kushner, Chair
Professor of Music

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Russell Robinson
Professor of Music

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